MINISTRY OF NATURAL RESOURCES

Sudbury District

LAND USE GUIDELINES

Ministry of
Natural
Resources

Hon. Alan W. Pope
Minister

W. T. Foster
Deputy Minister

Ontario

1983

MAP 1

PROVINCIAL AND REGIONAL SETTING OF SUDBURY DISTRICT

▨ Sudbury District

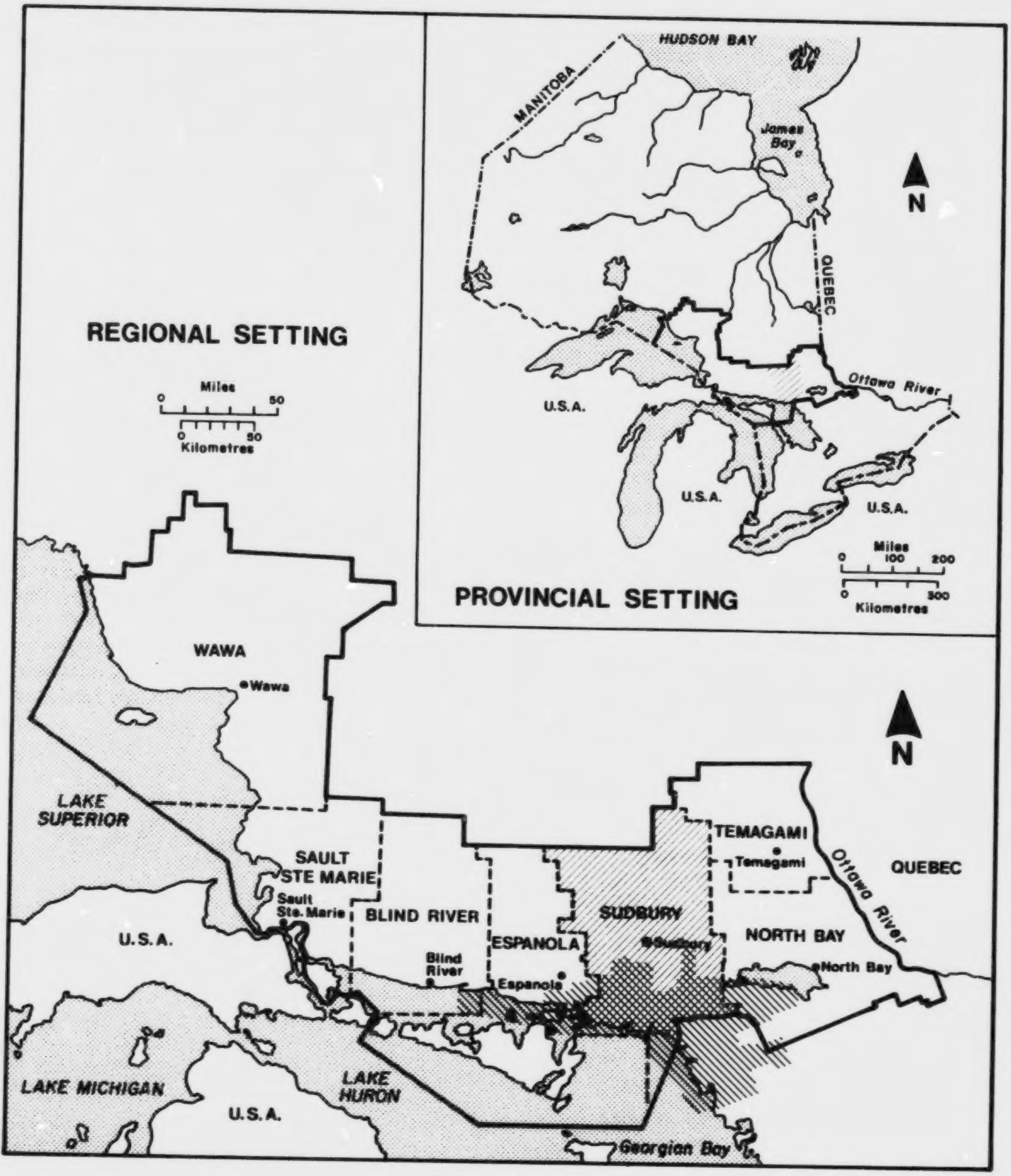
--- District Administrative Boundary

━ Northeastern Region Administrative Boundary

-·- Provincial Boundary

--- International Boundary

▧ North Georgian Bay Recreational Reserve



FOREWORD

The Ministry of Natural Resources has a primary responsibility for the management of the Province's natural resources, in particular those related to resource development and outdoor recreation.

This document will serve as a design for integrated resource development in the Sudbury District. It is also intended to provide others with an understanding of the Ministry's mandate and its programs which rely on both Crown and private lands for success.

To ensure an integrated approach, the *Sudbury District Land Use Guidelines* identify where and in what manner the Ministry may use Crown land, and to what extent it may wish to suggest uses of private land, in working towards the achievement of Ministry objectives.

For Crown land, the Ministry must consider the land and water requirements for both its own programs and those of other government agencies. This will require ongoing liaison with these other agencies. The Ministry will continue to consult with private landowners and local municipalities since the latter have the responsibility for control of private land use.

The program targets and approaches outlined in this document follow the overall direction outlined in the Ministry's *Northeastern Ontario Strategic Land Use Plan.* The *Land Use Guidelines* may serve as one of the sources of information for Ministry involvement in the planning process of municipalities and other agencies. It is recognized, however, that this document has no legal status.

Planning is a continuous process and must be responsive to changing needs, information and technology. Thus the targets and strategies presented in this document are subject to revision based on such factors as changes in government policy, new or refined resource information, and significant changes to land use in other planning documents. To accommodate changes, the *Land Use Guidelines* will normally be reviewed every ten years and will involve full public consultation.

Comments may be addressed to the District Manager at any time.

Regional Director
Northeastern Region

District Manager
Sudbury District

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A: district context

The Sudbury District is one of the seven administrative districts in the Northeastern Region of the Ontario Ministry of Natural Resources (map 1). Centered around the Regional Municipality of Sudbury, the District encompasses an area of 11,987 square kilometres of land and 3,024 square kilometres of water, including 1,554 square kilometres of Georgian Bay. It is situated approximately 390 kilometres north of Toronto, 300 kilometres east of Sault Ste. Marie, and 125 kilometres west of North Bay. Approximately 94 percent of the total population of some 177,000 residents (1980) reside in the Regional Municipality of Sudbury.

The waters of Georgian Bay and Lake Huron provide a moderating influence to the continental climate in the area characterized by short, warm summers and long, cold winters. Temperatures range from a mean minimum of −13.4°C in January to a mean maximum of +18.9°C in July. The prevailing winds are from the south in the spring and summer, and from the north in the winter. Frost-free periods range from 100 to 115 days and the average annual precipitation is approximately 835 millimetres.

The highest known point of land in Ontario (694 metres) is found in the Ishpatina Range in the extreme northeastern corner of the District. Elevations decrease southward to the French River Mouth (183 metres). The white quartzite LaCloche Mountains in the southwestern corner of the District provide a scenic backdrop to the Killarney area. Silver Peak reaches an elevation of 544 metres. With these exceptions, the District is dominated by moderately-broken upland areas from the northwest to the southwest, and weakly-broken plains in the Chelmsford-Azilda and Alban-St. Charles farming areas. Soil depths are very closely related to topography.

Situated within the Great Lakes-St. Lawrence River System, all watercourses in the area flow in a southerly direction and drain into either the North Channel of Lake Huron or Georgian Bay. This drainage pattern reflects the direction of glaciation and the underlying geology. Deep soils are characteristic of major river valleys and floodplains while areas of greatest relief usually have the shallowest soils. The lakes tend to be generally elongated in shape and oriented in either southeasterly or southwesterly directions. River channels tend to be narrow and well-defined facilitating the development of hydro-electric power generation sites.

The productive forest cover in the District is characteristic of the Great Lakes-St. Lawrence Forest Region transition zone. Mixed forests of white pine, white birch and white spruce (with some yellow birch, hard maple and hemlock) in the south gradually give way to coniferous or boreal forests with mixed stands of jack pine, white pine, red pine, white spruce, white birch and poplar in the north.

Past human activities have contributed significantly to the shaping of present settlement patterns and natural resource use. Archaeological fieldwork has verified that human use of this area began about 11,000 years ago, after glaciation. Over the ensuing period of several thousand years, population size increased as aboriginal groups gradually formed band societies and settled into specific areas following a subsistence lifestyle.

The French River region played a significant role in the fur trade. Into the late 1700's competition for furs forced traders to move northward from the French River into other areas of the District. The fur trade continued to flourish until the mid 1800's when the availability of furs was reduced. Remnants of buildings and artifacts from this era may still be found in the District today.

With the coming of the steam locomotive in the late 1800's, the community of Sudbury began to grow as a pattern of primary resource extraction developed. Crown lands were opened in the area north of Georgian Bay in 1872 and the demand for lumber products changed from railway ties, to square timbers, to the production of pulpwood and mining timbers.

With the advent of the process for separating copper from nickel in the 1890's, the mining industry escalated and from 1891 to 1941, the population of the Sudbury area almost doubled every twenty years. In 1980, the population was approximately 177,000. Assuming a 1.5 percent growth increase, it has been estimated that the population could increase to approximately 250,000 by the year 2000. If the current negative growth rates, resulting from lay-offs in the mining industry continue, however, substantial reductions to this estimated population projection could result.

Crown land represents 82 percent of the land and water area of the District. Approximately 16 percent of the land area within the Regional Municipality of Sudbury, around rural communities and along major roads and highways is held under private ownership. The remaining 1 percent is held under Federal ownership, largely in the form of the three Indian Reserves—Point Grondine, Whitefish Lake, and Wanapitei. Twelve townships in the northeast corner of the District, or approximately 9 percent of the total land area, are under a Caution, registered by the Bear Island Indians of Temagami.

The City of Sudbury is the focal point of the road network in the District. Trans-Canada Highway 17 bisects the District in an east-west direction through the City of Sudbury. Highway 69 extends south towards Toronto and Highway 144 stretches north towards Timmins. Highways 64 and 637 are also significant access routes to primarily rural and recreational areas in the southern portion of the District. The Trans-Canada pipeline also crosses the District through the City of Sudbury, as do several major and local hydro-electric transmission lines.

The main lines of both the Canadian National and Canadian Pacific Railways converge at terminal facilities in or near the City of Sudbury. There are also numerous local rail lines, including industrial spur lines and a major Canadian Pacific spur line to Sault Ste. Marie.

Grey Coach, Greyhound, and Ontario Northland Bus Lines provide passenger service on the major north-south and east-west routes through Sudbury. Within the Regional Municipality of Sudbury, a number of operators provide bus service, including the municipally-owned Sudbury Transit.

Air service is provided at the Sudbury Airport with direct connections to Toronto, Ottawa-Montreal, and Thunder Bay-Winnipeg by Air Canada, to Sault Ste. Marie, North Bay, Timmins and other small centres by NorOntair, and to Ottawa and Toronto by Voyageur Airways. A variety of other air flights are provided by charter services catering primarily to resource-based industries and tourists.

B: terms of reference

The *Land Use Guidelines* relates the policies of the *Northeastern Ontario Strategic Land Use Plan* to the District planning area by identifying the specific lands and waters essential for the achievement of program targets.

The document identifies land use areas with detailed management guidelines. These guidelines will outline how the Ministry might use public land and would like to influence the use of private land to achieve its resource objectives and targets. In the future, the *Land Use Guidelines* may be modified to reflect new information and changing circumstances.

The *Land Use Guidelines* indicates what the Ministry of Natural Resources wishes to achieve on Crown land, and influence on private land and the lands of other agencies such as conservation authorities, in order to achieve Ministry objectives. The *Land Use Guidelines* has no legal status. The planning control of private land in organized municipalities is exercised through municipal planning documents prepared in accordance with and under the authority of the *Planning Act* administered by the Ministry of Municipal Affairs and Housing.

There will be occasions when certain land uses or proposed developments on private land, while in conformance with municipal official planning documents, have a negative impact on Ministry programs or interests. When such situations arise, the Ministry will attempt to resolve problems through discussions with the proponents, the municipality, and the Ministry of Municipal Affairs and Housing. If the Ministry is unable to negotiate satisfactory results, it may consider taking further action under the procedures provided for in the *Planning Act* in accordance with Ministry of Natural Resources policy.

The Ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key participants in any effort to achieve effective and integrated resource management. The Ministry will continue to work with these groups, especially local municipalities, through the plan input and review program to ensure that natural resource values are considered in local planning documents.

The Regional Municipality of Sudbury was established as a planning area in 1978, including all or parts of 36 townships. Through the goals, policies, objectives and programs outlined in the approved *Regional Official Plan,* the Council set forth guidelines for its involvement in the development of the Region in co-operation with other Government agencies, public bodies, private interests and individuals. The *Regional Official Plan* reflects the collective concerns of the inhabitants of the area as to how the Regional Municipality should be developed during the 20-year span of the plan. In accordance with the *Regional Official Plan,* secondary plans are being prepared and adopted, one for each of the municipal settlement areas of Capreol, Nickel Centre, Onaping Falls, Rayside-Balfour, Sudbury, Wahnapitae, Valley East and Walden, and one for each of the resource components (e.g. agriculture) identified in the *Official Plan.* The Ministry of Natural Resources has been working on technical committees with Regional planning staff in the preparation of these secondary plans and the Ministry of Municipal Affairs and Housing has assisted this Ministry in ensuring that floodplain management policies have been appropriately reflected in the Onaping Falls, Rayside-Balfour, Valley East and Wahnapitae Secondary Plans.

Five other municipal organizations have been established within the Sudbury District. These are:

- The Corporation of the Township of Hagar;
- The Corporation of the Townships of Casimir, Jennings and Appleby;
- The Corporation of the Townships of Ratter and Dunnet;
- The Corporation of the Townships of Cosby, Mason and Martland; and,
- The Corporation of the Township of Rutherford and George Island.

These municipalities neither have official plans in place, nor have their respective councils expressed an interest in planning. The Corporation of the Townships of Cosby, Mason and Martland does, however, have an approved comprehensive zoning by-law which regulates uses on lands throughout the Municipality. The presence of private land and absence of planning documents in these municipalities may restrict the efforts of this Ministry in the protection of wildlife habitat areas, aggregate deposits and in the appropriate implementation of hazard lands policies. In the area covered by the *Cosby, Mason and Martland Comprehensive Zoning By-law,* the Ministry of Municipal Affairs and Housing will be assisting this Ministry in preparing an amendment to incorporate floodlines into the by-law once the floodline mapping has been completed for the West Arm of Lake Nipissing and the French River.

The Ministry of Municipal Affairs and Housing approved a Minister's Zoning Order for the Territorial District of Sudbury covering 48 townships within the Sudbury District. The Zoning Order is a development guideline intended to provide a basis for assessing development applications in these unorganized areas and to ensure that the provincial interest in land use planning is enforced, while providing for flexibility in the application of land use controls. An amendment to this Order will be prepared to incorporate floodlines once the flood line mapping has been completed for the French River and the West Arm of Lake Nipissing.

Where the *Land Use Guidelines* indicate that particular uses are not acceptable on private land, this indicates that the Ministry may not support such land use activities in the area and may respond accordingly when providing input to official plans or zoning by-laws and when commenting on proposals (e.g. consents and sub-divisions) circulated by the Ministry of Municipal Affairs and Housing and local municipalities. Such responses will be restricted to matters within the mandate of the Ministry of Natural Resources.

Conservation authorities are independent corporate agencies set up jointly, under the *Conservation Authorities Act*, by the local municipalities and the Province of Ontario to develop and implement water and related land management programs. The *Conservation Authorities Act* is administered on behalf of the Province of Ontario by the Ministry of Natural Resources.

The 39 conservation authorities are presently completing watershed plans which will outline the long-term direction of all authority programs. The primary program of authorities in flood and erosion control complements Ministry of Natural Resources programs. Other authority programs, particularly those in forestry, fish and wildlife and recreation, supplement the efforts of the Ministry of Natural Resources. Both agencies are making every effort to reduce duplication and overlap in their planning programs and to ensure that the delivery of resource management programs achieves the greatest possible benefits for the people of Ontario.

The Nickel District Conservation Authority is currently preparing such plans, for the area under its jurisdiction, to be available in late 1983. These plans will contain a statement of Conservation Authority management objectives, the rationale and justification for the means of achieving the objectives, a statement of broad policies, and a description of the planning responsibilities of the Authority in conjunction with other government agencies. These plans will also contain information supporting proposed management strategies on technical, environmental, economic and social assessments, identify major resource management issues and anticipated program direction including the means by which that direction will be developed. The Ministry of Natural Resources will continue to work closely with the Authority on related resource management program objectives.

Prior to the preparation and approval of the *Sudbury District Land Use Guidelines,* the Ministry had prepared a number of plans. In the event of a conflict between previous Ministry plans prepared for the Sudbury District and this document, the latter will normally apply. Examples of such prior planning documents are the *North Georgian Bay Recreational Reserve Plan* and the *Sudbury District Recreational Zoning Plan.*

The North Georgian Bay Recreational Reserve is a part of Ontario which has received special status due to its recreational potential and strategic location relative to centres of population. The Reserve spans parts of five Ministry of Natural Resources administrative districts (see map 1). The *North Georgian Bay Recreational Reserve Act* which established the Reserve in 1963 directed the Ministry to formulate a land use plan for the public lands which have potential for recreation. In 1971, the Minister tabled a Plan, for the Reserve, which has been in effect to the present time. The original *Reserve Plan* was based on the general concept that the recreational use of Crown land would normally be given preference over other uses but where other uses would not be excluded, except for very special cases.

The five district *Land Use Guidelines* have been developed in keeping with the intent and purpose of the *Act.* Although the main concepts of the original *Reserve Plan* have been maintained, some alterations have been made to accommodate changed conditions. Each of the five *Land Use Guidelines* has given special recognition to the unique recreational features of the Reserve. These documents will now be the guiding documents for carrying out the intent of the *Act*. The *Act* which created the Reserve will remain in effect to guide the future review and revision of the *Land Use Guidelines.*

The *Sudbury District Recreational Zoning Plan* was prepared in the late 1960's to guide the disposition of Crown land and to assist in the assessment of Ministry resource programs. The *Land Use Guidelines* will now provide guidance for disposition of Crown lands in the District.

It is also important to note that while no restricted area order under the *Public Lands Act* administered by the Ministry of Natural Resources, is in effect in the Sudbury District, all Crown land on the islands and bed of the Great Lakes have been withdrawn from prospecting and staking out under the *Mining Act*.

In addition to private land development proposals, municipalities, industry, and other government agencies may, from time to time, propose development plans which are of such magnitude that their implementation may have an impact on the policies and programs administered by the Ministry of Natural Resources. These types of proposals may permanently affect large tracts of land and alter local populations and economies. The following are examples of major development proposals which could affect the achievement of Ministry resource management program objectives:

- Ontario Hydro is currently investigating the possibility of enlarging the McVittie generating station on the Wanapitei River and continually assessing the need for additional transmission corridors (e.g. Hanmer to

Mississagi). These projects could result in adverse environmental impacts on affected natural resources.

- The Ministry of Transportation and Communications is continually constructing, reconstructing and/or relocating highway corridors which require Ministry review of preliminary design studies to eliminate problems in association with corridor selection including adverse environmental impact on affected natural resources.
- INCO Limited has commissioned a power feasibility study to assess the potential of certain areas of the Spanish River for the production of hydro-electricity and to assess the resulting potential environmental impact on natural resources.

The Ministry of Natural Resources will continue to play an active role through the plan input and review program to ensure that concerns relevant to the mandate of the Ministry are reflected in these and all other future development proposals in the Sudbury District.

C: planning process

The *Sudbury District Land Use Guidelines* was drafted according to the Ministry of Natural Resources *Guidelines for Land Use Planning.* Once the resource targets were defined in the initial draft of the *Northeastern Ontario Strategic Land Use Plan,* adequate background information was assembled pertaining to the people and the natural resources, present development and land uses, and the needs and wants of the residents. This information was then analyzed to determine resource capability, trends, land use conflicts and resource potential.

In 1979, a document entitled *Background Information—Sudbury District* was prepared and distributed to many interest groups, government agencies, industries and local residents. The document described the various natural resources of the District, their historical use, present utilization, capability and future considerations. In addition, the document outlined a number of resource management issues which would be dealt with in the *Land Use Guidelines.* Similar reports were prepared to support planning decisions made at the Provincial and Regional planning levels.

Based on an updated *Background Information Report,* the policies and specific resource targets assigned to the Sudbury District in the *Northeastern Ontario Strategic Land Use Plan* and subsequent public input, optional methods of achieving Ministry program commitments were developed. The *Phase II—Proposed Policy and Planning Options* for the Sudbury District was presented to the public for comment in June, 1982.

Four open houses were held in June of 1982 in the Sudbury area to explain the proposed policy and planning options outlined in the document and to invite public comment. In addition to receiving many verbal and written comments, as a result of the open houses and circulation of the documents, the Ministry held a number of follow-up meetings with municipalities and interest groups at their request. All public input was recorded and responded to, where possible, then analyzed, evaluated and filed.

Based on the analysis and evaluation of all the public input received, a final draft of the *Land Use Guidelines* was prepared. The Minister personally reviewed the District summary and analysis of the public comments and discussed the draft document with the District Manager. Further modifications were then made to the document as a result of this review.

Copies of all comments received throughout the District planning process from 1980 to 1983 are available for viewing in the Sudbury District Office as well as the Ministry of Natural Resources main office public reading room and the Legislative Library, both at Queen's Park in Toronto. Details of the public consultation program, such as attendance at open houses and the number of responses received, are found in appendix A.

Further to public comments received on the Phase II report, the publication of the approved *Northeastern Ontario Strategic Land Use Plan,* the existing situation in the District at the time of writing and Provincial circumstances, the planning option which seemed to offer the greatest achievement of targets and public acceptance was refined for approval. Section II — Policies and Guidelines represents the result of these efforts.

D: target assignment

The *Sudbury District Land Use Guidelines* represent the way in which the Ministry of Natural Resources may utilize land and water resources to achieve the targets assigned by the *Northeastern Ontario Strategic Land Use Plan* to the Sudbury District. The targets were initially tested on an individual basis through an analysis of resource potential. To ensure proper integration of resource management activities, the targets were then tested collectively. This process resulted in the identification of potential areas of land use conflicts. Ultimately, these conflicts were resolved either through target adjustment or the development of management guidelines designed to ensure appropriate integration of land use activities.

Details on the particular program targets assigned to the Sudbury District are described in table 9 — Summary of Target Achievements (Section II — C 12).

E: summary of planning options

As stated previously, three planning options were developed for the Sudbury District to indicate the various means by which the land and water resources could be utilized to meet the resource management program targets assigned to the District. The major distinction between these options was the magnitude by which the Ministry could strengthen its recreation and resource extraction program components and provide additional benefits.

Generally, the planning options described the land use activities permitted in certain resource management areas. Each area was described relative to resource management differences, primarily due to present and/or proposed uses and resource capability. In allocating the land and water resources of the District for various uses, those activities which were dependent upon non-renewable mineral and aggregate resources, lands with a high and moderate capability for food and timber crop production, fragile fish and wildlife populations and their respective habitat, and unique natural, cultural, historical and recreational landscapes and/or features were given primary consideration. A number of similar areas were described in each of the three planning options. The differences between the options reflected opportunities for the enhancement of the quality of outdoor recreation opportunities (i.e. Option 2), the maximization of resource extraction opportunities and commitments primarily related to the mining and forestry industries (i.e. Option 3) and an attempt to provide a balanced integration of recreation and resource extraction opportunities and commitments (i.e. Option 1).

A brief summary of each of the three options follows.

1. OPTION 1

Option 1 was designed to provide a balanced integration of recreation and resource extraction opportunities and commitments by emphasizing the multiple use of the planning area while optimizing the benefits to be realized from:

- those landscapes deemed necessary for the achievement of outdoor recreation opportunities;
- habitat areas essential for the achievement of fish and wildlife management commitments; and,
- resource products from those areas deemed necessary for the achievement of forest and mineral management program objectives. It did not provide for any additional recreation or resource extraction program opportunities.

Special management approaches were developed for the following unique landscape features associated with the achievement of certain resource program targets and previous commitments:

- Lakes Penage, Onaping, and Wanapitei were recognized as separate resource management areas to reflect the recreational values inherent in each area and to minimize resource user conflicts;
- the need to promote a preference for winter and/or temporary road access, wherever possible, in the areas south of the Regional Municipality of Sudbury, west of the Wanapitei River and northeast of Lake Wanapitei was recommended to permit fish and wildlife populations to increase in these areas;
- new commercial aggregate extraction operations were promoted on Critical and Significant aggregate deposits (i.e. *Land Use Policy* area 16);
- those lands with Canada Land Inventory Class 2, 3, and 4 capability for agricultural production, held under private ownership, within the Regional Municipality of Sudbury and within close proximity to Alban, Noelville, Hagar, St. Charles, Markstay, Estaire and Wanup were recognized as essential for food production and the sale of Crown lands with Class 2, 3, or 4 capability for agricultural production would only be permitted in these areas;
- commercial fishing would continue to be permitted on Paradise (Alphretta) and Wanapitei Lakes and on Georgian Bay according to the conditions prescribed in each commercial fishing licence;
- the number of cottage lots would be increased, primarily through subdivision development on Maskinonge, Onaping and Penage Lakes, with the remainder to be achieved through remote cottage lot type development;
- the unique habitat characteristic of the sport fisheries in the District, and increased fisheries management efforts, particularly on lake trout populations and habitat in those prime lake trout lakes within the sphere of influence of the fume damage were highlighted;
- mineral exploration and development was permitted throughout the District, with the exception of areas that have been withdrawn from staking (e.g. existing provincial parks) and special consideration was given to mining and mining-related land use activities on the Sudbury Nickel Irruptive and other high mineral potential areas;
- the following candidate park areas were recommended for inclusion in the Provincial Parks System:
  - Lady Evelyn-Smoothwater candidate (within this area, four options were considered by the Temagami District);
  - Sturgeon River candidate;
  - Wanapitei candidate;
  - French River candidate; and,
  - Killarney candidate expansion;
- an assessment of the potential for commercial outpost camp development and tourism development proposals, including the expansion of existing facilities, to increase the availability of tourism opportunities was also proposed;
- the special habitat areas required by moose, deer and elk were identified as well as the need to increase the size of each population and hunter harvest opportunities; and,
- areas essential for forest management were identified throughout the District.

Option 1 permitted the achievement of all the assigned resource targets contained in Section II —Policies and Guidelines.

2. OPTION 2

Option 2 attempted to enhance the Ministry of Natural Resources' commitment to the recreational opportunities available in the District by optimizing the benefits to be realized for outdoor recreation and fish and wildlife management in a multiple use setting with resource extraction and by attempting to minimize the loss of natural environment amenities, in certain landscape areas.

The following landscape areas, dominated by variations in physical relief, river and lake systems, a relative over-abundance of sport fish and wildlife resources, and not dominated by land uses related to urban, industrial, or agricultural development, were given special consideration:
- the Killarney, Georgian Bay-French River-West Arm of Lake Nipissing areas;
- Lakes Wanapitei, Penage, and Onaping; and,
- the upper reaches of the Vermilion, Sturgeon, Lady Evelyn-Smoothwater, and Spanish Rivers.

Inherent in these resource management strategies was the commitment to ensure that wherever resource use conflicts would occur, priority would be given to the protection of recreational values. Only uses which would not result in the loss of such values (e.g. aesthetics) or the resources upon which recreation and tourism are dependent (e.g. fish and wildlife) would be permitted. To this end, it was also deemed necessary to control and/or restrict road access in these areas to reduce the over-harvesting of fish and wildlife resources.

The allocation of all other resources in the remainder of the District was consistent with those outlined in Option 1. Option 2 also provided for the achievement of all the assigned resource targets.

3. OPTION 3

Emphasizing resource extraction in a multiple use setting, Option 3 attempted to enhance the Ministry of Natural Resources' commitment to the extraction of non-renewable and renewable resources in the District. The opportunities associated with resource extraction primarily related to mining and timber extraction were promoted.

It was recommended that current growth and development be permitted to continue and that Ministry efforts concentrate on the utilization of mineral, aggregate, timber, and commercial fish and wildlife resources. The need to protect and enhance fish and wildlife resources for the natural propagation of each species, upon which tourism and local recreational pursuits are dependent, was also promoted.

Inherent in this option was the maximization of resource extraction opportunities with the provision that, wherever resource use conflicts occurred, priority would be given to the extraction of resource products. The provisions for environmental quality, Road Access and Modified Management Areas policies and all other general policy provisions were, of course, to apply.

The allocation of resources in the District in this Option was consistent with the prescriptions outlined in Option 1, with the following two exceptions:
- roads were to be constructed according to general policy provisions, with no additional restrictions such as winter access only; and,
- recreational values associated with Lakes Penage and Wanapitei were not emphasized beyond the recommendation to establish a provincial park on Lake Wanapitei and to promote subdivision cottage development on Lake Penage.

Option 3 achieved all of the assigned resource targets.

F: response to planning options

The purpose of public consultation was to assist the Ministry in preparing planning options which would best serve the public. The public were encouraged to review and comment on the *Sudbury District Background Information*, published in March, 1979, and the *Sudbury District Proposed Policies and Planning Options*, published in June, 1982. Copies of each of these reports were circulated to members of the general public, other government agencies at various levels, special interest groups and industry. Approximately 250 copies of the *Background Information Report*, 5,000 brochures and 5,000 tabloids describing the Ministry of Natural Resources land use planning process and how the public could participate were released at two Information Centres, by mail and from the District Office between 1979 and 1982. Since June, 1982, approximately 650 copies of the *Proposed Policies and Planning Options* were released at four Open House sessions, by mail, at meetings with special interest groups and from the District Office. An estimated 400 people attended the Open House sessions. A total of 137 responses have been received in the form of briefs, letters, comment sheets, file memorandums, a number of meetings, and telephone conversations from various individuals, agencies, industries, and groups since June, 1982.

From an analysis of this input, some 95 issues were raised, of which 25 percent were directly related to the land use planning program; 62 percent were directly related to resource management techniques, funding, manpower and other issues, either beyond the realm of the land use planning program or the mandate of the Ministry of Natural Resources; and 8 percent of the comments received were either requests for information on the planning program and other Ministry responsibilities, or information related to the data base. The balance of the responses (5 percent) were constructive criticisms of the land use planning process, including the guiding principles and public consultation process.

Details on public input received are summarized in appendix A.

Briefly, changes requested by the respondents included:

- greater protection of the fisheries resources (i.e. 120 metre shoreland reserve on prime lake trout lakes);
- more restrictions on road access;
- recognition of hydro-electric power as a land use;
- limiting Crown cottage development to specific lakes;
- alterations to the proposed provincial parks system;
- more versus less aggregate to be extracted by the year 2000;
- less restrictions on the mining industry;
- more restrictions on the timber industry;
- a more positive approach to tourism;
- development controls in unorganized territory; and,
- hydro-electric power development versus provincial park status for the Spanish River.

This public input was incorporated into the preparation of the final planning option. Option 1 received the greatest support. It was revised to address specific issues such as: additional lakes to be given special consideration for tourism development and candidate areas recommended for park status; additional land use areas for agriculture, aggregate deposits and the Sudbury Nickel Irruptive to provide a clearer set of resource management directions; and a special management approach for the Spanish River to best accommodate the two conflicting concerns for the future role of the river. The Spanish River will be referred to the Parks Council as a study area.

Other concerns required further direction at the Provincial level (e.g. roads and reserves policies). To enhance Ministry efforts in habitat protection, a Non-consumptive Uses Policy was added to the Wildlife Management section; and the Forest Reserves Policy was redrafted and retitled the Modified Management Areas Policy. Other concerns will eventually be addressed through regular resource management plans (e.g. cottage development, road access strategy, forest management plans, etc.).

Finally, as discussed in the Terms of Reference, special considerations were given to the recreational values in the area referred to as the North Georgian Bay Recreational Reserve. To this end, for those areas within the Reserve, the land use area guidelines for each area (Section II – D) were modified as follows:

- the Land Use Intent section was qualified with a specific reference to the fact that the area was situated within the North Georgian Bay Recreational Reserve; and,
- certain features (e.g. yachting and small craft harbours, canoe routes, scenic viewing areas, etc.) were given special recognition in the discussion and/or land use guidelines section if they had not been addressed in the Phase II document.

Option 1 was, therefore, modified in an attempt to:

- maintain the land and water base required by primary and secondary resource industries;
- provide additional support for tourism by identifying an additional number of lakes for the assessment of their potential to support new and/or additional commercial tourism development;
- provide clearer direction for further Crown land disposition throughout the District;
- provide more restrictions on road access in certain portions of the District, in an attempt to enhance fish and wildlife resources by reducing accessibility; and,
- provide for a further assessment of the French River candidate park in an effort to resolve resource use conflicts and to provide a comprehensive resource management approach for this significant area.

The final planning option did not alter the pre-1980 job relationships in the mining and forestry sectors. The ability to maintain existing production levels in agriculture, forestry, aggregate, commercial fishing and bait fishing industries is expected to remain constant. Some potential for the expansion of the tourist industry is anticipated and increases in commercial fur harvests will continue to be promoted in an attempt to achieve quota levels. Increases in big game populations (i.e. deer, moose and bear) will also be pursued in the interests of both healthy natural populations and increased hunting opportunities.

The entire fisheries base in the District will be required to achieve the sport fishing target. Fisheries management efforts will continue to react to the loss of fragile fisheries habitat caused by acid rain which could significantly reduce angling success rates.

Throughout the District, opportunities exist for a wide variety of Crown land recreation activities including camping, canoeing, swimming, hiking, etc. Major new facility development should not be required to ensure that these opportunities are perpetuated. What will be required, however, is the monitoring of water quality, the consistent application of the Modified Management Areas and Access Roads Policies and the refinement of the Crown Land Recreation Policy. In short, the final planning option has been designed to best reflect the existing situation in the District, changing Provincial circumstances and all identified concerns.

Details of the specifics of the planning option are contained in Section II – Policies and Guidelines.

A: introduction

The *Sudbury District Land Use Guidelines* contain the general and specific resource management policies which will guide the administration of Ministry resource management programs, identifies areas critical and significant to the achievement of some program objectives (e.g. aggregate deposits) in the Sudbury District; and defines general operating guidelines or strategies for each policy. Area land use policies recommending specific operating guidelines for certain activities, are also outlined. The Policies and Guidelines consist of five subsections:

- B: general policies;
- C: resource policies;
- D: land use areas-guidelines; and,
- E: application.

These subsections are to be considered as one complete unit. To obtain a complete understanding of the Policies and Guidelines, these subsections must be read in conjunction with each other, not separately.

B: general policies

The *Northeastern Ontario Strategic Land Use Plan* discusses a number of general land use and planning policies. These general policies cover topics which are important to resource managers for the administration of public lands and natural resources and are the basis for land use planning across the Planning Region. This section contains these general policies.

1. GENERAL MANAGEMENT STRATEGY

Ministry guidelines and plans will be made to encourage orderly development, balance and future flexibility.

This objective will be accomplished by:

- ensuring that development is managed and proceeds within a framework;
- ensuring that different kinds and intensities of development are permitted within the District planning area; and,
- ensuring that some resource potential is held in reserve to allow for future options and to accommodate change.

Uncontrolled development results in inconsistency, conflict, and a duplication of effort and cost.

Balance also implies that minority as well as majority interests will be served.

2. ENVIRONMENT

The Ministry of Natural Resources will be committed to maintaining and improving overall environmental quality. All management programs of the Ministry will be subject to the *Environmental Assessment Act.*

The Ministry of Natural Resources will continue to identify, through its component programs, those areas which are sensitive to development.

Environment is defined in the *Environmental Assessment Act* as the social, economic, cultural and natural conditions that influence the life of man or a community.

The main concern of the Ministry of Natural Resources is that the environment provides the biophysical base for its programs. In addition, the Ministry has certain specific responsibilities related to the environment. These include the identification of sensitive program areas and the enforcement of legislation such as the *Endangered Species Act* (e.g. bald eagle nest on Badgeley Island area 6), the *Fisheries Act*, and the *Lakes and Rivers Improvement Act*.

The Ministry of Natural Resources will ensure that resource management activities adhere to the requirements of the *Environmental Assessment Act*.

Acid rain causes environmental effects on a continental and even global scale. The Ministry continues to be concerned over the effects of acid rain on vegetation and fisheries habitat in Ontario, and plans to continue to participate with the Ministry of the Environment in the 5-year experimental program begun in 1981. The purpose of the program is to investigate the feasibility of neutralizing acid surface waters to protect aquatic life in Ontario lakes susceptible to acid rain, and to rehabilitate lakes already damaged.

Sensitive areas, identified in the planning process, may be defined as those areas that contain features of value whose preservation may be defined as the main theme of management. The Ministry will continue its commitment to identify these sites through its component programs (e.g. fish and wildlife, parks, etc.).

In co-operation with the Ministry of Citizenship and Culture, the Ministry of Natural Resources will assist in the management of significant cultural resources within provincial parks and on Crown land.

3. LOCAL AND TRADITIONAL USERS

The Ministry of Natural Resources will actively involve local people and traditional resource users in the preparation of guidelines and plans. Public participation programs will emphasize the identification and consideration of the needs and wants of this group as a priority.

This objective will be accomplished by ensuring that the public is encouraged to participate in the preparation of guidelines and plans in an attempt to ensure that the concerns of all resource users in the District are duly expressed and properly considered.

Ontario Crown resources belong to all of the people of Ontario and will be managed in the best interests of all citizens of the Province, including local and traditional users. In preparing the guidelines and plans, the Ministry of Natural Resources has attempted to avoid the disruption of traditional or existing uses.

Native people living in northeastern Ontario are among the local and traditional users of certain natural resources. Effective communication with local and traditional users will be given special attention. Traditional native rights, both within provincial parks and on Crown land, will continue to be respected.

Effective communication with local and traditional users was given special attention during the preparation of the *Land Use Guidelines*. It should be stressed, however, that local and traditional users should not expect that their desires will always be fully met. In some cases, it may be necessary to give priority to National or Provincial concerns; an example may be energy requirements.

4. LAND AND WATER MANAGEMENT

a. Objective

The broad objective is to facilitate the orderly development and conservation of Ontario's land and water resources for continuous social and economic benefits for the people of Ontario; and to prevent loss of life and to minimize social disruption, property damage and loss of natural resource values from forest fires, floods, erosion, earth slippage and abandoned mines.

b. Proprietary Interest

The Ministry, through its programs has a custodianship responsibility for the 82 percent of the District that is Crown land. The proprietary interest is reflected in such programs as the removal of illegal occupations and the collection of acreage tax on mining lands. The government position on land claims, such as those by native peoples, including the Bear Island Indian Caution affecting 12 townships in the District, also reflects this proprietary interest.

Central to this custodianship responsibility is the maintenance of a record system for land transactions and an improved geographical referencing system including surveys, referencing standards and the expansion of the Ontario Basic Mapping program.

c. Multiple Use
The paramount concern in land and water management is the allocation of land and water in such a way as to ensure effective and efficient use and to best satisfy the needs of the people of the region and Ontario. Multiple use means that two or more uses occur in the same general area, either simultaneously or in sequence. Over a broad area, several single uses may also be permitted. This concept can ensure that a variety of recreational opportunities and renewable resources may be provided from the same land and water base.

The Ministry of Natural Resources strongly favours multiple use as a management strategy. The Ministry will, therefore, manage public lands and waters in an integrated manner rather than separately through its component resources. For private lands, the concept of multiple use will be encouraged. An integrated multiple use approach to resource use will provide optimum benefits for the people of Ontario.

Consistent with this multiple use approach, the Ministry will ensure that both the withdrawal of mining rights on Crown land and the withdrawal of productive forest land from forest management are kept to an absolute minimum. Here, the intent is to ensure that industrial development is supported by the broadest possible land base.

In keeping with this intent, a special approach will be taken within candidate park areas. Within these areas, identified park values will be protected. Uses and facilities which complement the achievement of park objectives will be encouraged. Uses which have no significant negative impact on the long-term achievement of park objectives will also be permitted with judicious controls. Those uses which would conflict with the long-term achievement of park objectives will be prohibited.

As part of the integration of uses, Ministry guidelines and plans will emphasize the role that water resources fulfill in northeastern Ontario. The Ministry will attempt to integrate various water resource uses such as transportation, recreation, hydro-electric power generation and flood control.

The Ministry will also continue to enforce appropriate legislation to ensure the maintenance of healthy fish populations and habitat, and of critical wetland areas. The preservation of natural amenities associated with the lakes and rivers and related land uses will also be promoted in the District.

The land and water management policy will be pursued through continued liaison with other agencies and groups such as municipalities, local conservation authorities, the Ministry of the Environment and private industry.

Where municipal development controls are in effect, the Ministry of Natural Resources will attempt to complement those planning efforts in its Regional plans and District guidelines. However, if a significant Provincial resource is inappropriately dealt with within a municipal planning document, the ministry will consider action under the procedures provided for by the *Planning Act*.

d. Crown Land Disposition
The Ministry disposes of land for a wide variety of uses in order to encourage private sector developments and initiatives.

When disposing of Crown land, the Ministry will ensure that:

- dispositions are consistent with existing policies and approved plans and meet the requirements of other agencies, ministries and municipalities;
- lands are developed or put to use, without delay, for the specific purpose for which they were granted; and,
- lands are disposed of at prices or rents which represent a fair market monetary return to the people of Ontario.

e. Crown Land Recreation
Recreational use of Crown land will be permitted with minimal restrictions for a wide variety of recreational activities.

The general policy for recreational use of Crown land is permissive, with no charge for residents, excepting where:

- resource use conflicts are, or would be, significant;
- environmental damage is evident, or would occur; or,
- such use would require either the occupation of a site in excess of 21 days or a permanent structure.

Where any of these apply, restrictions to Crown land use, including permits and fees, may be imposed. For example, hunting may be restricted in the vicinity of a logging camp, and camping may be restricted in picnic areas or on very fragile sites.

f. Hazard Lands
Hazard lands are lands having inherent environmental dangers such as flood or erosion susceptibility, instability or any other physical condition which could pose a risk of loss of life, property

damage or social disruption, if development were permitted.

Generally, the policy specifies that there should be no encroachment of structural development on hazard lands. While the Province has adopted a general principle of no development in the case of the flood plains, there are provisions for considering and accommodating exceptional circumstances. Relief from the strict application of the *Flood Plain Criteria for Ontario* may be sought through application of the two-zone, floodway-flood fringe concept, or in unique situations, with Provincial approval the application of the Special Policy Area approach.

In conjunction with the Nickel District Conservation Authority, the Ministry will continue to discourage development on flood prone lands, to participate in contingency planning and flood forecasting, and to provide remedial works to aid in the reduction of flood hazards in that portion of the District under the jurisdiction of the Authority.

Within the Regional Municipality of Sudbury, the Ministry of Natural Resources with the assistance of the Ministry of Municipal Affairs and Housing, will continue to ensure that flood plain criteria are appropriately reflected in the secondary plans for Onaping Falls, Rayside-Balfour, Valley East and Wahnapitae. In those portions of the District, outside of the jurisdiction of the Nickel District Conservation Authority, the Ministry will continue to play the lead role in identifying flood prone areas (including the shore zone of the Great Lakes on Georgian Bay), according to the policies and objectives of the Canada-Ontario Flood Damage Reduction Program. This is currently the case for the West Arm of Lake Nipissing and the French River where flood mapping is being completed. This Ministry, with assistance from the Ministry of Municipal Affairs and Housing, will be incorporating the completed flood mapping, as a planning control mechanism, under the Minister's Zoning Order for the Territorial District of Sudbury, and under relevant municipal by-laws.

The Ministry will also continue to discourage development on areas susceptible to erosion hazards, particularly along shorelines and river banks in proximity to spawning beds, and other hazardous conditions associated with ongoing Ministry-related program activities which would pose a risk to development such as erosion or instability conditions associated with abandoned mines or pits and quarries.

g. Fire Management

A new *Forest Fire Management Policy* for Ontario has been approved. This updated Policy does not recognize the two-zone protection concept stated in the recently approved *Northeastern Ontario Strategic Land Use Plan*. Rather, this current policy will more directly reflect the Ministry goal "...to PROTECT public lands and waters."

The effect of this policy revision is that each and every fire occurrence in Ontario will receive a response.

Fire has always been a significant factor in the forests of Ontario and will continue to have an impact on people and their environment. Forest fire management is, therefore, an integral part of land and resource management.

While reflecting the Ministry goal, the Policy will also take into account the following two key factors:

- wildfires cannot be totally eliminated from Ontario forests, therefore, fire management is based on the values being protected and on cost-effective operations. Where property and personal safety are involved, there will be an immediate response; and,
- forest fires are not confined to public lands, therefore, fire management is conditionally extended to all fire hazard lands of the Province, irrespective of land ownership or jurisdiction.

h. Waste Disposal

As the use and development of Crown land become more intense, the need for environmentally-sound waste disposal methods becomes more critical. A *Crown Land Waste Disposal Plan* will be prepared for the Sudbury District:

- to communicate to the local public through the use of the local media, signs, etc. the mounting problems of Crown land littering, the resultant need for a new approach to waste control and to propose resolutions;
- to apply conditions on waste disposal through work permits applied to the various bush operations (e.g. mining exploration, logging, etc.); and,
- to attempt to achieve a broader application of the anti-littering sections of the *Public Lands Act*.

Seasonal and permanent residences as well as industrial, commercial, and institutional developments in areas of extensive Crown land will be required to have adequate year-round waste disposal facilities as approved by the appropriate government agency. The Ministry of Natural Resources will continue to provide waste disposal sites in unorganized areas. The direction of management will, however, be towards developing a few high capacity sites in key areas of the District.

i. Water Management

Although not solely a Ministry of Natural Resources' responsibility, it is recognized that water quality concerns combine to create a significant issue in the Sudbury District. As will be mentioned in the Sport Fishing Policy, many District lakes are suffering from high acidity and recent information suggests that the problem is increasing.

Public concerns with local lake water levels are also commonly reported. The Ministry has both direct and indirect involvement in water level control. Directly, the Ministry operates and maintains 53 dams within the District. Indirectly, the Ministry participates in the determination of maximum and minimum water levels on 9 other dam-controlled lakes under the Sudbury District Regulated Water Management Program designed for recreation and flood damage reduction.

Unlike other parts of the country, northern Ontario has been blessed with such an abundance of water resources that, traditionally, not a lot of management effort was deemed necessary. Like many other supposedly infinite resources, however, the end of over-abundance is gradually coming into view. In assuming the responsibility for a portion of the water management functions of the Ontario Government, Sudbury District proposes to achieve the following strategies:

- to continue to assist in water quality control through the administration of the *Public Lands Act*, the *Beach Protection Act*, the *Beds of Navigable Waters Act*, the *Lakes and Rivers Improvement Act* and the *Fisheries Act* (Canada); and by participating with the Ministry of the Environment in the monitoring of water quality as it affects fisheries and recreational management;
- to endeavour to ensure that damage caused by flooding, erosion, and associated sedimentation is minimized;
- to continue to allocate and manage water and related land resources necessary for power generation, low flow augmentation, outdoor recreation and general public convenience;
- to provide for the control of surface waters and the regulation of water-related improvements in the District;
- to continue to regulate water-related improvements or developments through the *Lakes and Rivers Improvement Act;*
- to require that operational plans affecting the Crown land base provide specific reference to field operation procedures to be employed to facilitate the review and implementation procedures designed to ensure that water quality and quantity is not unnecessarily and unacceptably impaired;
- to continue to upgrade and revise the existing *Water Management Plan* to reflect the policies and guidelines in this document as well as maintain water level control schedules which will incorporate the needs of all water users in the District; and,
- to continue to regulate the water levels of lakes in the District controlled by dams operated by the Ministry of Natural Resources.

j. Access Roads

Access roads will be developed and maintained consistent with approved Ministry policies, resource management plans and operating guidelines. To ensure overall co-ordination, multi-year plans for road access will be prepared for the Province, the Region and the District. The following statements represent the basics of the Ministry Access Roads Policy:

- access roads will be built to stimulate the development and use of Ontario's natural resources;
- access roads will take into account tourism requirements for isolation, the needs of the mining and forest industries, outdoor recreation opportunities for residents of Ontario, and incidental general public, commercial, and industrial transportation uses;
- access road plans will be developed on a long-term basis and will be subject to public consultation;
- plans will take into account the requirements, if any, for public access;
- roads will be classified as permanent or temporary based on intended use;
- temporary roads will be rendered inoperative when intended uses are fulfilled;
- access roads may be closed, temporarily or seasonally, to the public for resource management and/or public safety reasons;
- road alignment will be planned:
  - to avoid lake access where appropriate;
  - to provide controlled access; or,
  - to provide public access

  consistent with the intended purpose of the road; and,
- all individual access road proposals will be subject to an alignment and impact review to ensure that:
  - the need for the road is understood;
  - some alternative routes have been explored;
  - affected resource users in the area have an opportunity to contribute to the planning of the project;
  - the selected route is aligned in such a way as to minimize its impact on existing resource users; and,
  - Ministry intentions concerning the future status of the road and possible use restrictions are clearly understood.

The District Manager will ensure that all proposed road plans are available for public review at the District Office. The District Manager will also review pertinent road location/construction plans for the upcoming year with all affected tourist operators, the local Northern Ontario Tourist Outfitters' Association representatives, and others. As a general rule, the Ministry of Natural Resources will attempt to ensure that all forest access roads are located at least 120 metres from the shoreline of lakes indicated by the District Manager. There will be many situations where this will not be possible and, in the event that proposed locations are not feasible, and in the event that alternative locations cannot be agreed upon, the District Manager will call a meeting of the parties involved, to discuss and resolve the differences.

While roads will generally be open to the public, the Ministry may elect to close roads under its jurisdiction where:

- an emergency situation exists or if public safety is in jeopardy;
- such action can be effectively utilized as a technique for limiting the harvesting of an over-utilized resource; or,
- an existing facility is placed in undue jeopardy due to unlimited public access.

k. Modified Management Areas

Modified Management Areas (MMA's) will be designed to maintain or improve resource values such as:

- fish habitat;
- wildlife habitat;
- scenic areas or other recreation or tourism resources and establishments;
- special features such as cultural, historic, biological or earth science sites; and,
- fragile forest sites

within a multiple use context. Land use activity within these areas will be designed so as to maintain and/or improve identified resource values.

The following statements represent the basics of the Modified Management Areas concept:

- as an initial position, Modified Management Areas will be assumed to be necessary on all shorelands; and,
- Modified Management Areas will be established on other areas as necessary.

The term Modified Management Areas replaces such terms as "forest reserve" and "buffer."

(i) General Modified Management Areas may be established to control any undertaking such as mining or recreational development.

Modified management, in the case of forestry, should apply to all operating activities such as road building, stream crossings, cutting, skidding and scarifying. Depending on local conditions, the prescription for forest management could provide for a broad range of utilization levels. Thus cutting could be permitted in some areas and not in others. There are a variety of cutting methods that can be used, however, there is no recommended best method.

(ii) Shorelands Because there is a keen competition for shorelands for such uses as forestry, fish and wildlife habitat and recreation, it should be assumed, as an initial position, that 120 metre MMA's are recognized on all shorelands. The dimensions of these areas may be altered, as necessary, to suit particular circumstances. Where it is determined that MMA's are not required, the reason will be documented and filed with the appropriate forest management plan.

The MMA's on shorelands should normally be managed by a two-zone concept where the inner zone, next to the water, is a zone of minimal disturbance. The outer zone should be an area of more general use, however, certain aspects of management will have to be carefully controlled. The extent of each zone will vary with local conditions such as topography and soil material.

The suggested width of the minimal disturbance zone is as follows:

Shore Slope in Percent	Width of Minimal Disturbance Zone
0	15 metres
10	30 metres
20	40 metres
30	50 metres
40	60 metres

The minimal disturbance zone could, in some cases, be an area where forest cutting is not permitted, but in other cases modified forest cutting could occur. Roads, which are considered a major disturbance, should not be built in the minimal disturbance zone.

Since roads can cause major losses of fish habitat, a set of guidelines for road construction will be attached to all work permits related to the shoreland area. Special reference should be made to stream crossings.

Lake trout are relatively rare and sensitive to disturbance and special attention will be given to protection of their habitat. To protect lake trout habitat, it may be necessary to modify management practices beyond the immediate shoreland area. Some management practices may have to be modified throughout the entire watershed around lake trout lakes.

Sensitive features of other fish habitat such as pickerel (walleye) spawning areas, must also receive special protection.

(iii) Other Areas MMA's may be identified, planned and managed for other program concerns as necessary:

- Wildlife: Areas for wildlife must include habitat of endangered species and may include deer and moose habitat or other special wildlife habitat such as heronries.
- Scenic Resources: Areas for the maintenance or improvement of scenery may be identified and managed. For example, areas along certain highways and designated trails may be identified as MMA's. However, it will not normally be acceptable to designate extensive areas of no forest cutting for this purpose. While it is recognized that it is desirable to leave some areas uncut, it is also recognized that a well planned forest harvest can result in a varied and pleasing landscape.
- Other Recreation or Tourism Resources and Establishments: Where it is in the public interests to do so, MMA's may be identified and managed to protect particular recreation or tourism resources and establishments. The extent of the no cut portions of such an area would have to be related to the direct and indirect benefits that would accrue to the people of Ontario from such protection. Each case must be judged on its own merits.
- Special Features such as Cultural and Historic Sites: MMA's may be identified and managed to protect those features which require protection.

(iv) Responsibility The Ministry of Natural Resources will identify and manage MMA's to ensure:

- that a management prescription is prepared for all MMA's and that all Ministry of Natural Resources program concerns are given consideration;
- that private sector interest groups, such as cottagers and special interest groups, are consulted and kept informed as necessary;
- that suitable records are kept of MMA's, their prescriptions and treatments; and.
- that suitable management controls are in place and implemented so that MMA's are managed according to the prescriptions.

5. ENERGY RESOURCES

The Ministry of Natural Resources may contribute to the implementation of Ontario's energy security policy through its allocation of land and water to various uses.

The Ministry may assist the Province in increasing the proportion of Ontario's energy consumption provided from resources within the Province and increasing public reliance on renewable and recoverable energy resources while decreasing public reliance on crude oil.

The Ministry of Natural Resources may assist in providing an increase in the contribution provided by the Province's indigenous energy resources from the 1978 level of 22 percent to a level of 37.5 percent by 1995. This may be achieved by:

- identifying lands and waters which have a potential for providing indigenous energy resources (e.g. hydro-electric power, uranium, oil, gas, lignite, peat, wood, etc.);
- continuing to recognize existing utility rights-of-way and to evaluate new proposals, on a case-by-case basis, to determine impact on Ministry program objectives and targets;
- co-operating with other agencies and the private sector in the identification and development of energy resources;
- allocating land and water for energy production in a manner which reflects both the importance of energy supply and the other resource potentials of the area;
- encouraging interim uses on lands and waters with significant energy potential which would not preclude their future use for energy production;
- encouraging energy recovery programs such as the use of forest residues from sawmill and pulpmill operations; and,
- identifying fuelwood sources from Crown land near urban areas.

Water power still provides about 36 percent of the electrical power in the Province and will continue to play a role in the energy future of Ontario. Within the District, hydro-electric facilities on the Spanish River (e.g. Big Eddy and High Falls) and the Vermilion River (e.g. Wabageshik) operated by INCO Limited to provide supplementary hydro-electric power to meet industry requirements, and on the Wanapitei River (e.g. Stinson, Coniston and McVittie) operated by Ontario Hydro to service residential and mining industry needs in the Sudbury area.

Ontario Hydro has identified undeveloped sites of hydro-electric power potential and the potential of existing generating stations for expansion in the Province. Within the Sudbury District, no new developments are proposed. Two sites on the French River have been identified as having some power potential (i.e. Dalles and Five Mile Rapids). In addition, potential sites with an average output totalling 45 megawatts have been investigated on the Spanish River. No further disposition will occur, if the surface rights of Crown lands within those areas required for either the dam or head pond, should INCO Limited further investigate the hydro-electric power potential of that portion of the Spanish River in Venturi, Hart, and Moncrieff Townships.

For hydro-electric power sites with an average of less than 2 megawatts, the Ministry of Natural Resources will entertain development proposals from any prospective developers.

The Ontario Ministry of Energy has accelerated the development of a comprehensive Provincial biomass energy program in consultation with the Ministries of Natural Resources, and Agriculture and Food. In the Sudbury District, potential exists in the form of forest biomass and energy recovery programs such as the use of forest residues from sawmill and pulpwood operations. In addition, the return to the use of wood stoves has recently increased the demand for fuelwood in the Sudbury area.

Additional potential exists in the development of peat deposits and solar energy. Also, an experimental wind generator near Coniston has been constructed to determine whether it is technically and economically feasible to install similar systems to augment diesel electric generators in locations where reasonably high average wind velocities exist during much of the year.

C: resource policies

The statements in this section express objectives and targets which the Ministry of Natural Resources proposes to achieve in specific program areas to the year 2000 in the Sudbury District. The objectives and targets were assigned through the strategic land use planning process.

1. AGRICULTURE

a. Objective

In accordance with the *Food Land Guidelines,* the Ministry of Natural Resources will provide Class 2, 3, and 4 Crown Agricultural Lands;(1) and in co-operation with the Ministry of Agriculture and Food, the Ministry of Natural Resources will encourage the use of Class 2, 3, and 4 private agricultural lands for agricultural purposes(2) to projected maximum requirements (e.g. target) to the year 2000.

b. Target

To encourage through plan input and review, the addition of the agricultural capability of the 10,900 hectares of Class 2, 3, and 4(3) cleared private agricultural lands for food production to the year 2000. These areas are included within area 15. BLEZARD VALLEY/HAGAR-ST. CHARLES/ALBAN-NOELVILLE/BURWASH/WANUP areas as identified by the Federal Department of the Environment *Canada Land Inventory Soil Capability for Agriculture.*

c. Strategy

- recognizing an additional 10,900 hectares of Class 2, 3, and 4 private agricultural lands identified by the Ministry of Agriculture and Food, through the plan input and review program, as essential to the achievement of the target;
- disposing of Crown land for agricultural purposes on Class 2, 3, and 4 agricultural lands to supplement food production, only where no reductions to the achievement of Ministry program objectives and targets as stated in this document are encountered. Even though the objective statement stipulates that only Class 2, 3, and 4 agricultural lands are a concern, the District has, in the Crown Land Disposition Policy, expressed an intention to make available by lease, sale, or otherwise Class 5, 6, and 7 Crown agricultural lands where the disposition will enhance an existing operation and provide a natural and viable extension to an existing farm operation. Such

disposition will occur, only if there is no impact upon the achievement of other program objectives and targets as outlined in this document; and,

- ensuring that through sequential land use management, compatible land uses occur on Class 2, 3, and 4 Crown agricultural lands which will not jeopardize the agricultural capability including:
  - permitting forest management practices on supplementary lands;
  - encouraging, through sequential use management, extraction of Critical and/or Significant aggregate deposits, where necessary, on Class 2, 3, and 4 private agricultural lands with subsequent rehabilitation which will not jeopardize their agricultural viability;
  - ensuring that lease documents for Crown land disposition for agricultural purposes contain conditions requiring the establishment of a farm type operation;
  - ensuring that patent documents for Crown land disposition for agricultural purposes are qualified for the establishment of agricultural farm type operations only; and,
  - ensuring that future forest management practices on Class 2, 3, and 4 private agricultural lands under the *Woodlands Improvement Act* have received prior approval from the Ministry of Agriculture and Food to avoid the risk of losing the investment since such areas may be required for agricultural production before the timber crop reaches maturity.

d. Discussion

The responsibility for the *Food Land Guidelines* rests with the Ontario Ministry of Agriculture and Food. The recommendations of the Ministry of Agriculture and Food will be given primary consideration in the decision-making process regarding the disposition of Class 2, 3, and 4 Crown agricultural lands.

There are currently 73,079 hectares of Class 2, 3, and 4 agricultural land in the Sudbury District. Of these lands, 13,571 hectares are under Crown ownership. Of the 59,508 hectares held under private ownership, 47,534 hectares were under production in 1976. Virtually all of the remaining 11,974 hectares of cleared privately-owned lands will, therefore, be required to achieve the target. These deposits are found primarily in the Blezard Valley area of the Sudbury Basin, in Cosby and Martland Townships, around the Towns of Hagar, St. Charles and Alban, and in the Townships of Ratter and Dunnet. These areas are primarily involved with the production of livestock, milk, field crops, vegetables and small fruits. The majority of these products are sold locally. The Blezard Valley area also produces cash crops, including potatoes and other vegetables.

In 1978, approximately 100 commercial farms were reported by Census Canada in the Sudbury District. The number of farms decreased after 1941, and then increased slightly after 1971. The size of the average farm also decreased after 1941, and then increased by 12 percent between 1971 and 1976 due, in part, to an expansion in the beef industry and demands for pasture and stored feeds. If these trends continue, the need for improved agricultural lands is also expected to increase.

Recently, this Ministry has been advised that the Ministry of Agriculture and Food will be conducting an updated inventory of all lands with a capability for food production in the Sudbury area. Pending the completion of that inventory, only the additional 10,900 hectares of cleared private land targeted for food production by the year 2000 will be recognized. The Ministry of Natural Resources will support the protection of those lands identified under the Canada Land Inventory as having Class 2, 3, and 4 capability for agricultural production from non-conforming land uses in these five agricultural areas and undertake a modification to this document to accommodate additional areas, if so directed.

2. COTTAGING

a. Objective

To complement the private sector in providing a variety of cottage opportunities, primarily to local residents.

b. Target

To provide 210 cottage sites from Crown land in the Sudbury District by the year 2000.

c. Strategy

- assessing the capability of Onaping, Penage, and Maskinonge Lakes for cottaging subdivision development:
  - where economically feasible;
  - where cottage lot development will not impair water quality; and,
  - where individual lots meet the site requirements of the Ontario Ministry of the Environment;
- disposing of cottage subdivision lots by tender, auction, draw, or other means where demand exceeds supply; and,
- attempting to develop remote cottage lots on waterway sites on inland lakes of 50 hectares or more in surface area by:

- assessing the suitability of the lakes listed in table 1;
- developing inland sites where demand justifies such development and where spacing standards can be met;
- carefully assessing the location of remote cottage lot development sites to avoid jeopardizing the development of sites with a potential for outpost camp development as identified in the Tourism Policy section;
- assessing the potential for remote cottage development on those lakes identified in the Tourism Policy section (appendix C) as not having a potential for outpost camp development; and,
- disposing of remote cottage lots on waterway and inland sites by tender, auction, or draw where demand exceeds supply.

TABLE 1 COTTAGING: CANDIDATE LAKES BY TYPE OF PROPOSED DEVELOPMENT

	Township	Lake	Township	Lake	Township	Lake
Subdivision Development Lakes	McCarthy Kelly	Maskinonge(1)	Fairbairn Emo Munster Ulster	Onaping	Dieppe Caen	Penage
Remote Cottage Lakes	Antrim	Lands & Forests #89	Attlee	Broker	Beaumont	Helen Graveyard
	Beresford	Knight Lonely Tillie	Bevin	Bevin Gabodin	Botha	Lands & Forests #41
	Clary	Marcia	Creelman	Bessie Frog	Davis	Lands & Forests #15
	Dunbar	Dunbar Little Dunbar	Dundee	Bluesucker	Emo	McDonald
	Fairbairn	Fairbairn	Haentschel	Stewart	Haddo	Haddo
	Halifax	Lower White Oak	Hoskin	Carrie	Howey	Bowland
	Humboldt	Mahzenazing	Kelly	Maskinonge Gawasi Carafel	Kilpatrick	Spoon
	Kitchener	Morton	Leinster	Shingwak	Lorne	Margaret
	Mackelcan	Wolf	Marconi	Lands & Forests #26	McCarthy	Big Valley Kettyle Lower Matagamasi
	McConnell	Evelyn Marjorie Rawson	Muldrew	Muldrew	Munster	Munster
	Parkin	Mowat	Rathbun	Rathbun Matagamasi	Rhodes	Richardson Kasakawawia
	Roberts	McGrindle Roberts	Seagram	Longer Pinetorch	Secord	Sled
	Servos	Dodd	Sheppard	Halleck Josephine Pedro	Stobie	Paradise Stobie Frederick
	Stralak	Franklin	Struthers	Bird	Sweeny	Ayotte
	Trill	West Cameron	Turner	Stouffer	Tyrone	McLeod Michaud

(1) This lake could be considered as a remote cottaging lake pending access considerations.

d. Discussion

While no accurate record of summer resort lots is available, it has been estimated that a total of approximately 5,200 cottages have been constructed to date in the Sudbury District. Approximately 300 user-days per cottage or 171 million user-days in total are generated by these cottages. Based on an assumed annual expenditure of $1,000 per cottage, approximately $5.3 million are generated in the local economy annually. The addition of 210 cottages would generate a further

63,600 user-days and an additional $212,000 in the local economy annually, as well as $1.59 million in construction costs, assuming $7,500 per cottage. The most concentrated areas of development occur along the French River and on Penage, Onaping, Trout and Nepewassi Lakes. A number of lakes were originally developed for cottaging and later converted to permanent residential use, including Long, Richard, McFarlane, and Ramsey Lakes.

Since the beginning of the planning program in 1978, 25 lots have already been released on Murray Lake. Other lakes in the District will be investigated and developed for cottaging according to their capability to support remote cottage development. As noted in the Tourism Policy, the potential for commercial outpost camp development will also be assessed under the Cottage Lake Planning Program.

The cottaging policy recognizes potential conflicts with other programs and development will be limited to those areas not identified for parkland, agricultural production, aggregate production, identified as unique features (e.g. heronries), hazard lands, or A_1 or B_1 lake trout lakes. The lake planning program will also be designed to conform to existing plans such as the *Official Plan of the Regional Municipality of Sudbury* and comply with the *Public Lands Act* which requires that 25 percent of the shoreline on all lakes in Ontario remain under Crown ownership.

The price of Crown lots will include associated service costs such as surveying. In addition, the acquisition of a Crown lot will require an ongoing commitment by lot owners for maintenance of associated facilities such as access roads and waste disposal sites.

3. CROWN LAND RECREATION

a. Objective

- To provide for recreational use by residents of Ontario;
- To increase economic benefits derived from non-resident of Ontario recreational use of Crown land; and,
- To minimize competition between resident of Ontario users and non-resident of Ontario users in areas where the quality of experience is unsatisfactory.

b. Target

Quantifiable Crown land recreation targets have not been developed.

c. Strategy

Currently, competition between resident of Ontario and non-resident of Ontario, recreationists using Crown land and its various resources is an important issue in northern Ontario.[4] In an attempt to deal with this issue, the following strategies have been identified within a Crown Land Recreation Policy for northern Ontario and will be phased in gradually:

- Crown lands will be zoned to either permit or prohibit Crown land camping by non-residents of Ontario;
- regulations will be passed related to the use of fish and wildlife resources by non-residents of Ontario. Regulations may contain species and/or harvest limits, seasonal restrictions, and may also specify base of operations;[5]
- Crown land camping sites may be selected and leased to the private sector to be managed as campsites and made available for public use at market prices;
- all non-residents of Ontario who camp on Crown land will be required to pay a user fee;
- existing access points, campsites, picnic and swimming areas, canoe routes, and trails will be maintained;
- Crown land use and trends will be monitored to determine the amount of recreational services and facilities required to adequately satisfy current and future demands;
- the capability of the land and water base will be assessed to determine whether additional Crown land recreation opportunities can be supported;
- through location and design, conflicts with other resource users and private sector developments, including commercial tourism establishments, will be minimized;
- Crown land recreation users will be encouraged to assist in the maintenance of recreational areas (e.g. removal of garbage);
- Crown land recreation users will be informed of the location of recreation areas, the level of services provided and opportunities available;
- some areas of the District will remain relatively undeveloped to provide back-country recreation opportunities;
- program criteria and priorities will be developed to guide the establishment and closure of recreational areas, facilities, and services;
- a basic level of service will be established for the management of most recreational areas. More intensive management will be confined to a few high capability recreational areas; and,

- the Ministry will co-operate with local clubs, municipal organizations, other government agencies and the private sector in the provision of outdoor recreational facilities and services which complement their facilities and services and achieve Ministry program objectives.

d. Discussion
Recently, problems relating to the use of recreational Crown land have become more pronounced. The increasing numbers of recreationists (both resident of Ontario and non-resident of Ontario) competing for finite and, in many cases, declining resources (fish, game, natural areas) have contributed to this situation. Over-harvesting by recreationists and commercial users, and changes in habitat resulting from resource development activities are the most apparent reasons for the declining populations.

As resources become, or appear to become, scarce, competition between users inevitably becomes more serious. Currently, competition between resident and non-resident recreationists using Crown land and its various resources is an important issue in northern Ontario. The main reasons for this becoming an issue are:

- increased demand by more people for fewer resources;
- the feeling by residents of Ontario that they should receive top priority in the allocation of such resources; and,
- the feeling that non-residents of Ontario should be required to pay for the relatively high quality of resources experience which Ontario's Crown lands provide and that they should contribute significantly to the tourism economy of the Province.

In summary, two key issues have been identified:

- the need to gain more economic benefit from non-resident recreational users; and,
- the need to reduce competition between resident and non-resident recreational users, particularly in situations where resource limitations are real or at least strongly perceived.

The basic principles guiding the Crown Land Recreation Policy are:

- to provide for recreational use by non-residents of Ontario in order to derive economic benefits;
- to allocate scarce or less plentiful resources for non-resident of Ontario use in such a way as to extract maximum economic benefits; and,
- to minimize competition between resident of Ontario users and non-resident of Ontario users in areas where either, because of limited resources or congestion, the quality of experience is unsatisfactory.

Crown land and water resources afford opportunities for angling, hunting, and cottaging. These activities are not included in the Crown land recreation program. Camping, swimming, hiking, and canoeing are the primary recreation activities included under this program.

The existing Crown land program elements have evolved in direct response to public demand for facilities and services rather than as a result of planning or policy implementation. Increasing use and a lack of facilities in some areas have resulted in a list of problems including over-crowding, local environmental damage, and conflicts between various recreational and non-recreational users.

The land requirements for Crown land recreation pose little conflict with other uses, such as logging and mining, since the areas needed are usually small and can often be integrated with other land uses. The main exception to this is the provision of some largely undeveloped canoe routes to provide additional back-country travel opportunities.

Areas with a high level of attraction for Crown land recreation enthusiasts are virtually the same as those described in the Tourism Section, with the addition of areas in proximity to existing provincial parks.

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4. FIRE MANAGEMENT

Although fire is not a land use, it can have a significant impact on land management. Just as land uses are affected by fire, they can also affect fire potential. Wildfire and prescribed fire can also modify the natural resource base, and, therefore, its ability to deliver natural resource products.

a. Objective

- To prevent personal injury, loss of life, and social disruption resulting from a forest fire;
- To minimize the negative impact of fire on public works, private property, and natural resources in Ontario; and,
- To utilize the natural benefits of fire in achieving Ministry objectives for land and resource management.

b. Target
Targets for fire control and use in the District are set and dictated by the targets established in specific land and resource management plans and in accordance with the stated objectives.

c. Strategy
The fire management program performs a support function providing expert knowledge and special-

ized services of fire control and fire use, to client groups within and outside the Ministry. These services will be carried out by:

- protecting values at risk through measures which prevent the occurrence of wildfires and control those wildfires which threaten values; and,
- using prescribed fire as an approved resource management tool.

The fire management program will be conducted within a comprehensive planning system and implemented in accordance with:

- area plans which prescribe fire management objectives for the District; and,
- delivery plans which describe the administrative procedures and operating guidelines necessary to accomplish the fire management objectives defined in each area plan.

Every forest fire in the District will receive a response and each response will be governed by:

- the predicted behaviour of the fire; and,
- the potential impact of the fire on life, property and other values.

The fire management program will be performed in a well-planned, safe and cost-effective manner, while ensuring that:

- legislated obligations are met;
- Ministry responsibilities are fulfilled; and,
- all land and resource management requirements, relative to fire, are met to the extent possible.

The fire management program will maintain its standards and momentum by:

- employing modern research and systems support techniques;
- transferring available technology to practical application; and,
- recognizing personnel as the primary component of the program.

In order to achieve the stated objectives and minimize the above concerns and impacts, the District will:

- administer and enforce the *Forest Fires Prevention Act;*
- develop fire prevention and control agreements with municipalities, railways, forest industry and others;
- promote fire prevention on Crown and private lands through education and information dissemination;
- ensure an appropriate response to every wildfire;
- ensure that resource development and extraction activities in forested areas minimize fire spread and impact; and,
- consider the use of prescribed burns, in accordance with the *Prescribed Burning Manual,* as an effective management tool primarily for attaining forest management objectives and reducing fire hazards on high risk sites.

d. Discussion

The fire occurrence history of the District for the past 15 years by 5-year periods, is as follows:

Year	No. of Fires	Total Hectares
1968-1972	960	2,305.1
1973-1977	1,425	5,685.3
1978-1982	728	815.7

The Sudbury District experiences a major fire load in the months of May and July, with June showing a slight let-up. This seasonal trend in fire occurrence can be partially attributed to the effects of sulphur fumes on the vegetation. Heavy sulphur fumes during the winter months retard the leafing-out process in the spring, thus adding to the spring hazard. By June, the leafing-out process is completed and the fires decrease slightly in number. The hazard increases in July when the drying-out of broad-leaf plants is accelerated by sulphur emissions, and the number of persons holidaying in the Sudbury area increases.

This trend may be slowly changing due to the presence of the INCO superstack, constructed in 1972. This structure has increased the height at which sulphur emissions are released to 380 metres. Less concentrated sulphur emissions in the area close to Sudbury may result in a drop in the number of fires occurring in the immediate vicinity of the Regional Municipality. The major forest fire-related concerns in the District are:

- the numbers of fires in the spring along railway lines and in the summer caused by blueberry pickers;
- severe fire occurrence in the north half of the District in areas of pure jack pine and widespread budworm damage; and,
- the fact that fires, by virtue of their number and location, have an impact on private property and drain Ministry manpower and equipment resources.

The use of prescribed fire in the District will continue on a limited basis. Harvesting practices in this District are not generally conducive to prescribed burn treatments. Exceptions include limited cutting of the E.B. Eddy licence area (northwest quarter of the Sudbury District) and Cockburn Lumber and Poupore Lumber licence areas (primarily in the northeast quarter of the

District). All prescribed fires will be carried out for purposes of slash and duff layer reduction to promote regeneration.

Co-operative fire prevention and control agreements have been established with various municipal organizations, railway companies, and industries. These agreements are primarily designed to provide assistance in the suppression of fires in the more heavily populated areas of the District. At present, agreements of this nature have been drawn up with:

- the Towns of Walden, Onaping Falls, Rayside-Balfour, Valley East, Capreol, Nickel Centre, and the City of Sudbury;
- the Corporation of the Townships of Cosby, Mason and Martland; Appleby, Jennings and Casimir; part of Haddo and Dunnet; and the Corporations of the Townships of Hagar, and Rutherford and George Island; and,
- volunteer fire departments in Cartier, Monetville, and Alban.

5. FISHERIES MANAGEMENT

The fisheries resource is managed for both recreational and commercial uses. In addition to specific policies for commercial and sport fishing, there is also a need for a general policy related to fisheries management.

a. General

(i) Objective To protect, enhance, maintain, and rehabilitate fish communities and their environment in order to provide an optimum contribution of fish, fishing opportunities and their associated benefits to society.

(ii) Strategy

- recognizing that fisheries are an indicator of environmental quality in the future management of both fisheries and their habitat in Ontario;
- preparing and implementing a fisheries management plan for the Sudbury District;
- conducting fisheries inventory programs to expand knowledge for more effective management (e.g. lake inventory surveys, water quality studies, experimental management);
- formulating fisheries management plans for "type lakes" (type lakes are defined or identified on the basis of their fish communities) based on information from fisheries assessment units;
- ensuring that environmental quality, essential to maintaining the health of the aquatic communities is retained;
- enforcing legislation to protect the fisheries, fish communities and fish habitat in the Sudbury District;
- monitoring fish communities for signs of stress and taking corrective action (e.g. adjusting harvests, creel census and commercial fish catch monitoring);
- allocating fisheries resources, where there are competing users:
  - to maintain healthy, balanced fish populations; and,
  - to provide the optimum mix of consumer benefits. Harvest allocations will be based on an objective, careful examination of all relevant biological, social and economic factors to ensure that optimum benefits accrue to the residents of Ontario. It will be the responsibility of both anglers and commercial fishermen to participate in co-operative management and to adhere to their catch limits, quotas and the regulations to protect the fish stocks and guarantee their perpetuation for the future.
- continuing to work with American jurisdictions, in the interests of further protecting the Great Lakes fisheries resources, to ensure that balanced harvests of fish stocks are assured and management strategies are compatible;
- encouraging the use of less desirable species (e.g. ling, common sucker, alewife, smelt, etc.);
- maintaining plantings in heavily-fished lakes or lakes where reproduction is impaired; and,
- rehabilitating degraded aquatic communities by:
  - improving fisheries habitat;
  - eliminating undesirable species and introducing desirable species; and,
  - restructuring fish communities to restore optimal inter- and intra-species relationships (e.g. predator-prey relations, etc.).

(iii) Discussion Increases in the population and economy of the Sudbury area have been accompanied by increases in demands on the natural resources in the District. The fisheries resource is no exception. It has experienced a greatly increased demand from both commercial and recreational user groups. In some cases, this pressure has resulted in the over-fishing of some fisheries populations. A progressive decline in fish stocks and habitat degradation have occurred in association with one or a combination of the following land uses:

- land development;
- early farm and forestry practices;
- hydro-electric power development;
- smelters and refineries;
- urban development; and,
- cottage development.

Acid rain causes environmental effects on a continental and even a global scale. It is becoming apparent that uncontrolled emissions of acid-producing pollutants will eventually put great stress on many of our fisheries resources. In the Sudbury area, stress on the aquatic environment caused by sulphur dioxide and heavy metals emissions has resulted in a reduction of the potential productivity of many of the waters in the District.

To meet District fisheries management objectives, many of the detrimental influences will have to be eliminated. The strategies provided under the following policy sections are, obviously, remedial and will tend to only alleviate the detrimental effects of a few of the problems encountered in the District. The resolution of most problems will probably have to await the advent of more advanced knowledge concerning acid rain and heavy metals contamination. To this end, the Ministry of Natural Resources plans to continue to co-operate with the Ministry of the Environment in the 5-year experimental program, begun in 1981, to investigate the feasibility of neutralizing acidic surface waters, to protect aquatic life in Ontario lakes susceptible to acid rain, and to rehabilitate lakes already damaged. It is also quite possible that, for some problems, no solution will be forthcoming or that the cost of the solution may preclude application. In the event that an economically viable process for lake rehabilitation is discovered, a restoration plan will be prepared. Hopefully, new environmental assessment studies will assist in the protection of fisheries resources.

b. Sport Fishing

(i) Objective To maintain opportunities for a diversified angling experience and to meet the future angling demand for all species within the limits of sustained yield management.

(ii) Target To satisfy angling demand through the provision of up to 125,000 kilograms of sport fish per year (Table 2).

TABLE 2 SPORT FISHING DATA FOR INLAND WATERS

Area	Total Productive Inland Water Area (hectares)	Total Annual Fish Yield (x1000 kg/yr)	Annual Sport Fish Yield (35%) (x1000 kg/yr) (Target)	Present Angler Days (x1000 kg/yr)	Present Sport Fish Harvest (x1000 kg/yr)	2000 Predicted Angler Days (x1000 days/yr)	2000 Predicted Demand (x1000 kg/yr)
Sudbury District	129,071	358.0	125.0	404.0	183.0	452.0	204.0

(iii) Strategy

- considering the following eight lakes, with over 1,000 hectares in surface area, as being the most critical to the maintenance of the fisheries resources in the District: Wanapitei, Onaping, Venetian, Vermilion, Penage, Pogamasing, Trout, and Nepewassi;
- providing for the survival and maintenance of the warm water species, particularly walleye, small- and largemouth bass, and northern pike and their respective habitat in the District by:
  - identifying all lakes presently containing or which are known to have contained these warm water species;
  - introducing or restocking lakes with walleye, either adults or fry, of the most suitable strain to best adapt to particular lake conditions (e.g. stream or river spawners, shoal spawners); and,
  - improving the muskellunge population in the French River;
- providing for the survival and maintenance of cold water species, namely brook trout and lake trout, wherever they presently occur, and introducing new stock to suitable lakes and streams by:
  - assessing all trout waters to determine:
    - reproductive success;
    - habitat suitability;
    - relative abundance;
    - community structure; and,
    - stocking success;
  - reclaiming lake trout lakes (which have been invaded by undesirable species) through restocking or natural reproduction; and,
  - stocking lakes which do not presently have natural populations of brook trout due to a lack of spawning sites and low pH,(6) and stocking lakes which have suitable habitat but no top predator;
- enhancing angling opportunities by providing species diversity and satisfying the recreational angling demands for sport fishing;
- researching economically feasible methods to restore district lakes to their former productivity to produce sport fish species;
- rehabilitating degraded aquatic habitat including that portion of Georgian Bay in the Sudbury District; and,
- improving access to waters capable of sustain-

ing additional sport fishing opportunities.

The management of the 129,071(7) hectares of inland waters was considered critical in the formulation and achievement of the target.

(iv) Discussion Fisheries management efforts in the Sudbury District are constrained by a number of factors, including the large number of small lakes, increasing sport fishing pressure and water pollution.

The large number of lakes tends to disperse management efforts and to reduce the effectiveness of fisheries management programs. Further to protecting and maintaining sport fish stocks in all lakes in the District, the Ministry has identified a number of fisheries where management efforts will be focused to more effectively achieve the target (e.g. the new stocking of certain lakes, special protection for the largest lakes, special protection for unique fisheries habitat such as brown trout waters, etc.).

Anglers are presently harvesting approximately 183,000 kilograms of fish. Day-use opportunities associated with this activity currently represent 404,000 days annually. Projections to the year 2000 indicate that these opportunities are expected to increase to 452,000 days annually with a predicted demand of approximately 204,000 kilograms of sport fish annually.

The target is based on the assumption that production potential from fresh water is related to the amount of dissolved solids in the water, the average depth of the water and the surface area of the waterbody. Of the total water area in the District, 129,071 hectares of inland waters have the capability to produce a total of approximately 350,000 kilograms of fish annually (based on a Morphoedaphic Index of 1.52). Sport fishing use represents 35 percent of the total sustained yield or approximately 125,000 kilograms of sport fish species annually. Some of the projected demand will be met in Georgian Bay coastal waters, but insufficient data precludes an assessment of the potential available from those waters at this time. Over-fishing will continue to be a major constraint to the achievement of the sport fishing target over the next 20 years.

Acid rain will also seriously affect the ability of District sport fish management programs to accommodate angling demand over the next 20 years. It is highly probable that all District lakes receive sulphur dioxide input. High levels of sulphur dioxide can directly influence the potential of any lake to produce fish, but the concentration levels and total effect of acidity on the aquatic community are determined by the geology and the meteorological conditions (e.g. annual precipitation and wind direction) of each watershed basin. Generally, the dispersal pattern of acid rain has taken on an elliptical shape around the City of Sudbury, with a north-northeast and south-southwest alignment, the direction of the prevailing winds. Within this area, some lakes have experienced the total eradication of aquatic plants and fish with a high degree of sensitivity (e.g. lake trout). Estimates of pH and alkalinity levels in District lakes suggest that unless:

- steps are taken immediately to cut back or completely eliminate sulphur dioxide emissions; or,
- new technology is immediately forthcoming, offering an economical means of restoring these lakes to their former potential,

many more District waters will succumb to high acidity levels.

c. Lake Trout

(i) Objective To manage for the survival and maintenance of significant lake trout populations as well as the provision of angling opportunities.

(ii) Target To protect significant lake trout waters in the Sudbury District. All lake trout lakes in the District have been evaluated and classified according to their ability to produce and maintain a lake trout population. Management efforts will be concentrated on those lakes with the higher potential (e.g. type A_1, B_1, A_2 and B_2 lake trout lakes, refer to appendix B for definitions).

(iii) Strategy

- managing all designated A_1 and B_1 type lake trout lakes exclusively for lake trout by:
  - retaining shoreline ownership and controlling its use; and,
  - prohibiting additional access and development;
- managing all designated A_2 and B_2 type lake trout lakes for lake trout, with development proposals, on a case-by-case basis, by promoting development designed to minimize environmental impact on the aquatic habitat by implementing shoreline setbacks, prohibiting the destruction of vegetation, etc., to guard against erosion and other influences which would endanger the spawning beds and fisheries habitat; and,
- managing non-designated C type lake trout lakes for non-lake trout species as required.

(iv) Discussion Oligotrophic lakes are the preferred habitat of lake trout. Such waters are characterized by low dissolved solids, high transparency, high oxygen levels, thermal stratification, low productivity, and cold water temperatures. These waters are not known for large fish yields. Lake trout fisheries are extremely vulnerable to over-exploitation and are sensitive to cultural stresses.

Cultural stresses, resulting in excess eutrophication, are usually caused by:

- man-made water impoundments and diversions altering oxygen levels and thermal stratification;
- domestic and industrial water pollution including acidification;
- agricultural and forestry land uses resulting in increased sediment loading; and,
- road construction and increased accessibility causing greater fishing pressure by outdoor recreationists.

If pH of less than 5.5 is used as a cut-off point, the acidification originating from the Sudbury smelting complex can be considered to have reduced or presently restricted lake trout development in 69 (45.1%) of the 156 known District lake trout lakes. In 1980, water samples for pH and alkalinity levels were collected from 153 (96.8%) of these 156 lakes, representing approximately 50 percent of the inland surface water area of the District, and 42 lakes (27.5%) displayed a pH of less than 5.0. Lake sizes varied from small headwater lakes such as Acid Lake (18 hectares) to very large lakes like Chiniguchi (1,151 hectares) and Matagamasi (1,393 hectares). The latter two lakes are among the largest fully acidified lakes in the world. An additional 26 lakes (17.0%) were reported to be in the 5.0 to 5.49 pH range.

The alkalinity data presents an even more serious situation. Sixty-eight percent (105 lakes) of the lakes fall in the "highly sensitive" (0.2 mg/L) classification and 23 percent (36 lakes) can be considered "sensitive" (2.0-10.0 mg/L). Only 9 percent (12 lakes) have alkalinities in the safe zone (1 mg/L). Four of the latter lakes no longer sustain lake trout populations.

It is evident that the limited number of lake trout lakes in the District have been severely reduced through acidification. Their loss should be viewed as a significant loss of angling potential in the Province.

d. Commercial Fishing

(i) Objective To encourage the harvest of commercial fish populations when it is biologically and economically feasible.

(ii) Target To provide a total of 170,000 kilograms of commercial fish annually by the year 2000, primarily through the harvest of unexploited or lightly exploited non-game species.

(iii) Strategy

- maintaining the use of an annual fisheries resource allocation system for Georgian Bay Statistical District No. 1 and part of Statistical District No. 3 representing an annual yield of 136,000 kilograms or 3.8 percent of the total annual yield for Lake Huron;
- maintaining the annual commercial fish harvest of lake whitefish and herring from Wanapitei and Paradise Lakes on a sustained yield basis;
- maintaining the annual commercial fish harvests in the waters of Georgian Bay within the Sudbury District;
- setting regulations and quotas to promote a sustained yield of commercial fish species from commercially-fished waters;
- promoting the development of local markets for commercial fish species taken in the District;
- attempting to minimize the conflicts between commercial fishing operations and sport fishermen in certain areas of Georgian Bay (i.e. Statistical Districts 1 and 3);
- meeting the demand for baitfish through natural and artificial culture providing that the expansions have no detrimental effects on the sport fish industry; and,
- encouraging bait fishermen to fish cyprinids and sucker minnows from District lakes where an abundant supply is available. Those lakes where the supply is limited will be avoided.

(iv) Discussion Any increase to the commercial fishing allocation will be dependent on:

- under-utilized species;
- presently unmarketable species;
- continued recovery of the Great Lakes fishery from previous over-exploitation and sea lamprey invasion; and,
- rehabilitation programs (e.g. splake, lake trout, salmon, etc.).

Management strategy dictates that a conservative approach be taken when planning the increased use of a resource. In the case of harvesting unexploited or lightly-exploited non-game species, consideration must be given to the effect that exploitation will have on both population (intra-specific) and community (inter-specific) resources. To allow time for these responses to occur and time to permit them to be measured, attainment of the maximum yield should be approached in an upward series of progressive stages. Realization may also be long-term if the ultimate objective is to maximize the production of high value species such as lake trout, splake, or salmon.

6. FOREST MANAGEMENT

a. Broad Objective

To provide for a continuous contribution to the economy by forest-based industries and to provide for other uses of the forest through sound forest management.

b. Objectives

Within the limits of sustained yield management to provide to the forest-based industries a supply of wood sufficient to meet estimated industrial requirements.

To encourage the production of the maximum "value added" to the Provincial economy from the industrial use of the forest resource by promoting as full and complete a utilization of the available forest resources as is commercially possible.

c. Target

By the year 2000, to provide 279,500 net merchantable cubic metres (NMm^3) of conifer and 156,300 NMm^3 of hardwood annually from Crown land for industrial consumption by the forest-based industries and for fuelwood as an alternate source of energy (table 3).

d. Strategy

- providing a supply of wood sufficient to meet industrial wood requirements, through sustained yield management by:
  - designating a land base of 583,793 hectares of Crown land production forest to meet the demand for committed and projected wood fibre requirements of the forest industry and fuelwood users;
  - managing the production forest according to approved forest management and operating plans on the three Crown management units in the Sudbury District;
  - assisting Espanola District in the review and audit of the forest management and operating plans prepared for that part of the production forest in Sudbury District under Forest Management Agreement with E. B. Eddy Forest Products Limited;
  - determining the required level of forest management and implementation of silvicultural practices to meet the needs of the dependent forest industry; and,
  - conducting inventories of soil types and establishing productivity ratings by tree species to assist in formulating the most cost-efficient forest management regeneration techniques;
- ensuring that where supply problems (i.e. volume or quality of wood materials) arise, the following strategies, in order of priority, are followed:
  - first, the forest industry will be required to fully utilize existing timber supplies;
  - second, forest production will be improved; and,
  - third, distribution of forest allocations will be improved;
- priorizing and applying intensive forest management practices on Crown production forest lands, according to distance from mills and site quality;
- implementing a licensing and access roads program to ensure an optimum distribution of the allowable cut to licensees;
- encouraging multiple use through discrete harvesting activities in sensitive and special

TABLE 3 TIMBER DATA

Management Area	Present AAC (cubic metres)		Estimated AAC Target 2000 (cubic metres)		Present Harvest (cubic metres)		Crown Production Forest (hectares)
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	
Wanapitei[(1)]	71,128	43,502	66,860	41,760	36,969	17,177	215,236
Trout Lake[(1)]	45,807	22,887	45,800	22,880	32,386	11,554	131,648
Killarney[(1)]	46,624	35,799	38,970	27,010	38,600	9,250	95,654
Eddy[(2)]	179,976	124,720	118,320	59,150	—	—	126,900
Latchford[(3)]	13,191	7,603	9,550	5,500	18,322	—	14,355
DISTRICT TOTAL	**356,726**	**234,511**	**279,500**	**156,300**	**126,277**	**37,981**	**583,793**

(1) Calculated data for units that lie entirely within the District Administrative Boundary.

(2) Estimated data, FMA administered by Espanola District but falls partly within Sudbury District. Harvest operations have occurred outside the District since the early 1970's.

(3) Estimated data, Latchford Crown Management Unit administered by the Temagami District, with two townships in Sudbury District: Acadia and Dundee.

forest areas (e.g. along shorelines, in critical wildlife areas), excepting such areas excluded from harvesting operations;

- improving the level of forest management on private lands by:
  - identifying private lands, not required under the Agricultural Policy, with a potential for forest management, and assessing the total production forest available and benefits to be realized; and,
  - improving public awareness of forest management by providing information and technical advice to private landowners regarding the potential and management of their forested lands;
- promoting private land forestry under the *Woodlands Improvement Act* according to suitable criteria including site productivity, ease of access, hectares to be treated, and availability of equipment, wherever feasible, staffing and funding permitting;
- encouraging the use of trees and tree species which the forest-based industries presently under-utilize by:
  - undertaking utilization studies to define utilization levels and informing the forest-based industries of the results;
  - enforcing the *Crown Timber Act* to ensure that utilization practices meet legal requirements;
  - recommending reductions in the allowable cut where the consistent under-utilization of wood fibre occurs in licence areas;
  - applying licensing procedures to minimize or exclude forest types or stands poorly utilized by licensees as conditions permit; and,
  - continuing to provide woods operators with up-to-date information on market requirements and standards;
- managing forested lands for multiple use by:
  - consulting with interest groups, agencies, and/or individuals in an attempt to minimize or eliminate resource conflicts with forestry activities;
  - placing a greater emphasis on the need to accommodate and enhance other resource uses and values by modifying planned harvesting operations while adhering to the principles of good forest management; and,
  - adhering to the Access Roads and Modified Management Areas Policies; and,
- providing uncommitted and under-utilized wood fibre for fuelwood by:
  - designating stands not required or under-utilized by forest-based industries as fuelwood lots;
  - maintaining an adequate supply of suitable wood for commercial fuelwood operators;
  - conducting tendered timber sales, where necessary, to either maintain or increase the current level of commercial fuelwood production;
  - promoting a program of stand improvement work in tolerant hardwood stands to enhance the availability of fuelwood in the interests of good forest management; and,
  - developing and maintaining a program to permit the salvage of dead, diseased, windblown and/or physically damaged trees.

e. Discussion

Allowable Cut Crown Land Base To sustain the annual allowable cut of 279,500 cubic metres of conifer and 156,300 cubic metres of hardwood, 583,793 hectares of Crown production forest must remain committed to fibre production and be actively managed as such. Any reduction in this land base will diminish the capability to supply wood at the target level unless fibre production on the available land base can be increased through more intensive silvicultural practices. These 583,793 hectares of Crown production forest land represent approximately 48 percent of the Crown land in the District.

The estimated annual allowable cut projected to the year 2000 required consideration of the following factors to ensure a continuous supply of wood products to the year 2020:

- it takes up to 100 years to produce a mature crop of trees;
- wood fibre volumes produced per hectare are dependent on the intensity of management applied;
- the capability of the land base to produce industrial wood fibre; and,
- the necessity of formulating wood fibre production strategies to ensure that management objectives can be achieved.

The concept of sustained yield production of wood fibre to the year 2020 is based on the availability of adequate funding and staff to achieve management objectives. A change in intensity of management or the size of the land base will result in a change in the capability of the Crown production forest land base to produce industrial wood fibre. Factors such as fire, disease, insects and the established Modified Management Areas will also influence target achievement.

Crown Land Forest Management Planning and Implementation Sudbury District has three Crown management units and a portion (about 40 percent) of the Lower Spanish Working Circle of the E. B. Eddy Forest Management Agreement area. Although the requirements of plans differ for the Forest Management Agreement and Crown management units, all four forest management plans describe:

- how each forest type is to be managed on a sustained yield basis with an individual annual allowable cut and silvicultural system;
- how the unit or area is to be accessed; and,
- where the harvest operations will take place over the next 20 years.

It is the responsibility of the Ministry to formulate and initiate forest management practices which most efficiently regenerate areas depleted on the Crown management units. Under the Forest Management Agreement with E. B. Eddy Forest Products, this responsibility is assigned to the Company in an effort to redistribute the Ministry's regeneration workload and thereby increase the amount of forest area treated annually. Table 3 summarizes, by forest management area, the projected annual allowable cut required to meet the demands of the woods industries to the year 2000, and table 4 summarizes, by forest management area, the estimated average annual regeneration required under sustained yield management to ensure a continuous supply of wood products to the year 2020.

Special Forest Areas Forestry operations may have a temporary adverse impact on the landscape (e.g. aesthetics) and these must, therefore, be buffered to reduce resource conflicts. These buffered areas will be managed for resource extraction by utilizing discrete harvesting techniques where applicable or by choosing a time frame designed to minimize a conflict in resource values or uses. The Access Roads and Modified Management Areas Policies will provide direction in managing these areas.

Private Land Forestry Management The most effective legislative tool for improving and expanding forest management practices on private land is the *Woodlands Improvement Act.* Under this *Act,* an agreement can be entered into with a private landowner to either plan an area or manage an established woodlot. A minimum of two hectares of suitable land is generally required before an agreement can be considered. An agreement spans a 15-year period, after which time it may be renewed and rewritten, if required. The *Woodlands Improvement Act* program has not received much publicity in the Sudbury area. There are, currently, 39 *Woodlands Improvement Act* agreements encompassing approximately 200 hectares in the District. Expansion of this program is possible.

Under-utilization Most hardwoods, particularly white birch and poplar, have traditionally been poorly utilized by the forest industry. Conversely, softwood species, with only minor exceptions, have been satisfactorily utilized. It is only recently that more complete utilization of all available hardwood and softwood species has become possible. This development has resulted primarily from a combination of wood and species shortages, improved and new technological developments in the forest industry, revised building code standards, species substitution, and market acceptance of new wood products. Nevertheless, economic considerations will continue to play an

TABLE 4 ESTIMATED AVERAGE ANNUAL REGENERATION

Forest Management Area	Species	Type of Regeneration		Total Regeneration (hectares)
		Natural (hectares)	Artificial (hectares)	
Wanapitei Crown Management Unit	Conifer	81	1,092	1,173
	Hardwood	857	61	918
	Total	**938**	**1,153**	**2,091**
Killarney Crown Management Unit	Conifer	7	682	689
	Hardwood	632	127	759
	Total	**639**	**809**	**1,448**
Trout Lake Crown Management Unit	Conifer	72	617	689
	Hardwood	250	507	757
	Total	**322**	**1,124**	**1,446**
Eddy Forest Management Agreement Area	Conifer	124	1,855	1,979
	Hardwood	1,758	702	2,460
	Total	**1,882**	**2,557**	**4,439**
TOTAL	**Conifer**	**287**	**4,246**	**4,530**
	Hardwood	**3,497**	**1,397**	**4,897**
	TOTAL	**3,781**	**5,643**	**9,424**

important role in determining the degree of utilization of all species.

Regardless of the fact that a much wider range of species and wood products is now marketable, the cyclical boom-and-bust nature of the forest industry continues to cause short-term utilization problems for some woods operations. Most utilization problems are, however, of a temporary nature and can be remedied rather easily and quickly. For example, the demand for fuelwood has provided an opportunity to utilize more hardwoods, particularly white birch and poplar. The introduction of tree-length operations and slash-chippers has alleviated the problem of utilizing the full merchantable content of a tree. On most tree-length operations, the required utilization standards are now being exceeded.

Multiple Use Although timber production must continue to be a major responsibility of the Ministry, increased attention must be given to other resource uses and values. To reduce the real and perceived impact of forest management activities on the environment, a number of measures will be undertaken to foster multiple use and reduce conflicts on the forested lands in the District including:

- Harvest Operations—the timing, shape, and extent of the harvests will be manipulated to protect or enhance watershed, recreation, wildlife and fisheries habitat as well as aesthetic values.
- Site Preparation—careful selection of site preparation methods and machinery will continue to safeguard against soil erosion and to protect habitat requirements and aesthetics:
  - only approved chemicals for herbicide application will be used; and,
  - the increased use of prescribed burning as a site preparation tool will be promoted and conducted according to approved procedures.
- Tending—the management of tree crops through to maturity often requires tending work, including both mechanical and chemical methods to eliminate or reduce undesirable species competition and to ensure that plantations properly survive to maturity.
- Forest Management Requires Good Access—road location, construction, and maintenance have a visual and physical impact on the landscape. Decisions concerning road location must also consider the resource perception of other users. In addition, reasonable safety criteria will be adopted to protect other users. Environmentally-sound criteria for these activities will be adopted and implemented.

Fuelwood:

- Public Fuelwood Lots—the number of cutting permits issued for fuelwood in the Sudbury District has increased dramatically from 82 in 1973-74 to 2,985 in 1979-80. Recently, however, the total number of permits issued decreased in 1981 to 1,675 for established fuelwood lots amounting to a total estimated volume of approximately 14,500 cubic metres. Forest stands designated as public fuelwood lots will continue to be a major source of fuelwood supply in the District. Permits will be made available until the estimated cordage available in each lot is reached. The volume made available each year will, of course, fall within the allowable cut as set down in each Crown management unit (table 5).

TABLE 5 ANNUAL VOLUME AVAILABLE FOR FUELWOOD 1980-1990

Crown Management Unit	Personal Use (cubic metres)	Commercial (cubic metres)	Total (cubic metres)
Wanapitei	7,000	7,000	14,000
Killarney	4,800	5,500	10,300
Trout Lake	2,300	5,000	7,300
TOTAL	**14,100**	**17,500**	**31,600**

- Commercial Fuelwood Lots—an increasing emphasis will be placed on commercial production to meet rising fuelwood demands. Commercial production will help to reduce Ministry costs and increase utilization. The opportunity also exists to "clean up" cut-overs and to initiate stand improvement programs. Tendered sales will be used to maintain a desired level of commercial production when established commercial producers fail to meet the demand.
- Salvage—salvage of dead wood annually accounts for approximately 10 percent of fuelwood production. Salvage of wood as outlined in the strategy will be permitted in most areas of the District. Areas considered to be sensi-

tive (e.g. lakeshores) to cutting of any kind, will require more careful consideration, and salvage operations in such areas may be prohibited.

7. MINERAL MANAGEMENT

a. Broad Objective

To encourage a balanced economic and social contribution to the Sudbury area by the identification, orderly development and utilization of mineral and other earth resources.

b. Metallic and Non-metallic Minerals and Fossil Fuels

(i) Objective To encourage exploration and development of the mineral resources of the region.

(ii) Target Although no target has been established for mineral production, the Ministry will ensure that as much land as possible is open for mineral exploration and development. Approximately 95 percent of the high, medium and low mineral potential Crown land remains available for exploration in the Sudbury District.

(iii) Strategy

- ensuring that lands having high and medium mineral potential are available for exploration;
- ensuring that the Nickel Irruptive (8) (including mines and other mineral deposits, ore processing plants, and tailings areas) will be designated primarily for mining and mining-related activities;
- ensuring that lands having a potential for mineral development, including peat extraction, are only available for other uses which are compatible with mineral exploration and development activities through sequential multiple resource use;
- continuing to evaluate lands presently withdrawn from mineral exploration and development, and recommending for reopening such lands not required for the achievement of other programs as stated in this document;
- ensuring that prior to the permanent withdrawal of mining rights for any purpose, the Ministry first examine the mineral values to determine the effects of the withdrawal;
- assisting, where possible, in the implementation of Ministry mineral exploration assistance and incentives programs in the Sudbury District;
- encouraging municipalities to support mineral exploration and extraction as land use activities;
- recognizing the resource potential of existing and future mineral development areas for other uses (e.g. fish and wildlife habitat), in the initial development stages and as a component part of site rehabilitation efforts; and,
- facilitating the development of the peat resources in the District by establishing and co-ordinating an intergovernmental process for all applications under the *Mining Act;*

(iv) Discussion High and medium mineral potential lands are considered critical to the achievement of the Mineral Management Policy. This includes the unique geological feature situated in the Sudbury Basin known as the Nickel Irruptive. With the exception of those areas where Critical and Significant aggregate deposits are situated on the Nickel Irruptive and have been given separate resource management area status (e.g. area 16. AGGREGATE DEPOSITS), the Sudbury Nickel Irruptive has been identified as a separate resource management area, area 18.

Mineral deposits and geological reports, unpublished data and aeromagnetic map interpretation have revealed that the mineral exploration potential of the Sudbury District is high for metallic and industrial metals in the central portion of the District. Areas surrounding the Sudbury Basin and extending into the southern portion of the District are of moderate potential.

Sedimentary rocks in the Sudbury Basin contain some important copper-zinc deposits and, of the numerous intrusions of mafic rock in the area, the Sudbury Nickel Irruptive hosts all the major copper-nickel deposits. INCO Limited and Falconbridge Nickel Mines Limited are the two major companies in the Sudbury area operating 17 copper-nickel mines. Also, silica is extracted from Badgeley Island in Georgian Bay.

For some time, Sudbury was the major world producer of nickel, accounting for over 75 percent of total world production. In the last two decades, however, depressed copper-nickel prices have forced INCO Limited and Falconbridge Nickel Mines Limited to severely curtail production. Nevertheless, future prospects appear promising based on the high mineral potential and large mineral reserves throughout the District.

Major difficulties related to mineral exploration and development include:

- Crown land withdrawals from staking (exploration);
- complexities added to exploration activity due to private ownership of surface and/or mineral rights; and,
- added restrictions which may be placed on exploration and development activity by municipalities. Much land is already developed

or committed to development for uses which may be incompatible with exploration and mineral development.

c. Mineral Aggregate

(i) Objective To meet anticipated future demand with minimal disturbance to natural and cultural resources and the social environment.

(ii) Target To ensure a total cumulative supply of 140 million tonnes to the year 2000. This target represents the minimum supply which must be identified.

(iii) Strategy The objective and target will be achieved by:

- ensuring that Critical and Significant aggregate deposits are identified for aggregate extraction on Crown land by:
  - discouraging long-term disposition on Critical and Significant Crown land aggregate deposits;
  - ensuring through sequential land use management, that compatible land uses occur on Critical and Significant aggregate deposits (e.g. agriculture and forestry); and,
  - identifying existing pits and quarries on Crown land and encouraging compatible uses on adjacent lands, prior to the extraction of the aggregate resources;
- promoting the availability of Critical and Significant aggregate deposits on private land for aggregate extraction by participating in the land use planning programs of other agencies, including municipal official plans and zoning by-laws by:
  - ensuring that through sequential use management, compatible land uses occur on Critical and Significant deposits; and,
  - identifying existing pits and quarries on private land, and encouraging compatible uses on adjacent lands, prior to the extraction of the aggregate resources;
- promoting the utilization of aggregate deposits on private land rather than on Crown land where access and quality considerations are similar;
- wherever feasible, delaying the development of aggregate deposits situated under existing timber plantations until such time as the plantations have reached maturity and can be harvested;
- wherever feasible, delaying the planting of timber stock on Critical and Significant aggregate deposits until such time as the deposits have been developed and the sites have been rehabilitated;
- through the *Mining Act* and otherwise, ensuring progressive rehabilitation of all existing and proposed pits and quarries to desired uses. With the exception of certain constraints, such as the height of the water table, site rehabilitation to almost any desired sequential use such as agriculture, recreation, forestry, housing, commercial or industrial use is expected;
- conducting an inventory of Critical and Significant deposits and unclassified areas of crushable aggregate and unclassified deposits of sand to assess their probable quality and quantity and developing a strategy for their protection and development;
- continuing to identify sand deposits and assessing their market value in terms of quantity, quality, and accessibility;
- encouraging, through municipal planning mechanisms, the appropriate treatment of existing pits and quarries, wayside pits and quarries, and Critical aggregate areas, (whether situated within area 16, or not) namely that they be considered as conforming uses unless stated otherwise and protected from onsite or adjacent incompatible land uses; and,
- ensuring that, where land use conflicts between agriculture and aggregate removal occur because of aggregate shortages, the aggregate removal receives a higher priority, with subsequent rehabilitation. This is recommended because alternate sources of agricultural land are more readily available than are alternate sources of aggregate.

(iv) Discussion The mining industry is the major consumer of aggregate in the Sudbury District. The Ministry of Transportation and Communications and the forest industry also use major quantities of aggregate for road construction. In 1976, approximately 4 million tonnes of aggregate were extracted in the area. This amount represented approximately 55 percent of aggregate extraction in the Northeastern Region. Based on projected requirements provided by the major aggregate users in the Sudbury area, namely the mining industry, the Ontario Ministry of Transportation and Communications and the forest industry, approximately 105 million tonnes of aggregate will be required by the year 2000.

Aggregate demand was calculated by projecting aggregate consumption on a per capita basis for the period 1976 to 1980 (e.g. 25 tonnes per person annually) through to the year 2000 using a 1.5 percent population increase in the Sudbury District. Assuming an average depth of 1 metre of material ±490 million tonnes of mineral aggregate could be situated in the Sudbury District. There is, therefore, significant potential for aggregate in the Sudbury area.

Areas identified by the Ministry as Critical and Significant aggregate deposits as well as some unclassified and unknown areas are essential for the achievement of the mineral aggregates objective and target.

Critical deposits include:

- large volume, high quality crushable aggregate sources with access;
- in aggregate areas, all presently identified sources of high quality crushable aggregate regardless of size or access; and,
- deposits of possible Provincial significance.

Significant deposits include:

- deposits of varying quality, but with unlimited access;
- possible extensions of Critical deposits based on geological reasoning; and,
- possible high quality crushable aggregate sources with limited access.

Unclassified and unknown areas include deposits other than those identified as Critical or Significant and areas with known potential. To date, only a few unclassified and untested sand deposits have been identified.

All major, known deposits have been identified as a separate area, area 16. AGGREGATE DEPOSITS (exceptions have been noted under areas 1 and 15). Reference should be made to the *Sudbury District Aggregate Potential and Operations Map* (as amended) for a detailed description of the boundaries of each mineral aggregate sub-resource management area.

The configuration of each area is expected to change significantly as the testing of aggregate material for quality and quantity provides a more complete data base. Similarly, many unknown deposits will be discovered and proven throughout the planning period. In these latter cases, a modification to area 16 may be required.

Reference in the Strategy to a preference for the extraction of aggregate resources from private lands, where access and quality considerations are similar, is designed as an attempt to ensure that Critical and Significant aggregate deposits on private land are not lost for future use to non-compatible uses (e.g. residential). It should also be noted that the Ministry cannot guarantee the continued use or level of production from legally existing pits and quarries, both now and in the future.

8. PROVINCIAL PARKS

a. Goal

To provide a variety of outdoor recreation opportunities, and to protect provincially significant natural, cultural, and recreational environments in the Sudbury District, within a system of provincial parks in Ontario.

b. Objectives

(i) Protection To protect provincially significant elements of the natural and cultural landscapes of Ontario.

(ii) Recreation To provide provincial parks outdoor recreation opportunities ranging from high intensity day-use to low intensity wilderness experiences.

(iii) Heritage Appreciation To provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario.

(iv) Tourism To provide Ontario's residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the Province.

c. Targets

(i) Protection and Heritage Appreciation

- Earth Science: to protect the provincially significant, representative and special earth science features found in the Sudbury District. A geological time scale has been developed which outlines 33 ancient and 9 recent environments containing several hundred features of Provincial significance. The target is to protect those features in the Sudbury District, which best represent certain of these environments.
- Life Science: to protect the provincially significant life science features found in the Sudbury District.
  The plant and animal communities which are found in any area depend upon climate and soil conditions. A classification system has been adopted which attempts to define every combination of climate, soil texture, moisture conditions, and microclimate likely to be encountered in Ontario. The target is to protect a natural plant and animal community representing each of the site types in the Sudbury District.
- Historical Resources: to protect the provincially significant prehistoric and historic resources found in the Sudbury District.
  The opportunity exists within provincial parks

to represent activities such as early logging, the early fur trade and early mining operations and communities. Thirteen major historical themes and 115 theme segments have been identified for Ontario. The target is to protect those prehistorical and historical resources in the Sudbury District that best represent certain of these themes and theme segments.
- Heritage Appreciation: to provide opportunities to meet the demand of exploration and appreciation of the natural and cultural heritage of the Sudbury District.

(ii) Recreation and Tourism By the year 2000, to provide the following additional opportunities in provincial parks in the Sudbury District for visitors to, and residents of, the Northeastern Administrative Region:

Activity	Opportunities
day-use	8,900
car-camping	57,100
back-country travel(9)	
—wilderness	34,100
—non-wilderness	17,200

The targets for day-use, camping, and back-country travel recognize the anticipated population growth and future demand for tourism. Projections for future needs have considered the magnitude of population changes, the changing age structure of the population and its relationship to participation in recreation activities.

To assist in the achievement of parks objectives, provincial parks in Ontario have been divided into six classes: wilderness, natural environment, nature reserve, waterway, recreation, and historical. The classification system is intended to:
- define the role of the individual parks in achieving the objectives of the Provincial Parks System;
- provide the basis for management of the diverse resources in the system;
- encourage a greater public understanding of the various roles of parks; and,
- enable managers to provide a diversity of satisfying outdoor recreation experiences to individuals.

d. Strategy
- encouraging tourist use of provincial parks within the District and providing additional supply, supplementary to private sector supply, when necessary;
- assisting in monitoring the capacity in provincial parks to meet the targets of 0.93 day user-days and 0.53 extended user-days per capita;
- assessing the park system within the District to determine whether sufficient opportunities exist for the exploration and appreciation of the natural and cultural heritage;
- assisting in monitoring the capacity in District provincial parks to provide wilderness and non-wilderness back-country travel;
- conducting earth science, life science and cultural inventories, within and outside the Provincial Parks System;
- reviewing within the context of the *Land Use Guidelines*, park candidates in order to determine whether a particular candidate:
    - should be recommended for park status;
    - should be dropped from further consideration for park status; and,
    - should be identified as an Area of Natural and Scientific Interest (ANSI)(10);
- ensuring that the provincial parks program is managed to complement, rather than compete with, adjacent tourist facilities, and the existing municipal, private, and national parks systems; and,
- continuing to respect traditional native rights within provincial parks.

e. Discussion
The Sudbury District component of the Provincial Parks System will be comprised of the existing and candidate provincial parks described in table 6. These areas will play an important role in providing a wide variety of recreational opportunities, in offering protection to important natural and cultural features and in contributing to regional tourism.
- Existing Provincial Parks: Windy Lake, Fairbank, Halfway Lake, and Killarney Provincial Parks will continue to provide the bulk of car camping, day-use, and recreational opportunities for local residents and tourists.
- Candidate Provincial Parks: The Killarney Expansion, French River, Sturgeon River, and Lady Evelyn-Smoothwater candidate provincial park areas will provide protection for a wide variety of significant natural and cultural resources and significantly add to the wilderness and non-wilderness back-country travel target achievements.
- The System of Nature Reserve Parks and Historical Parks: This system is incomplete and further sites may be identified over time. This includes the reassessment of the values represented by the Eighteen Mile Island, Mason Township Wilderness Area to determine whether the intent of the designation is still valid and to include the area under the candidate nature reserve park class, if warranted.

  It is anticipated that some of the nature reserve and historical park requirements can

TABLE 6 EXISTING PARKS AND PARK CANDIDATES—SUDBURY DISTRICT

Park/ Candidate	Classification	Target	Recommendation
Windy Lake	Recreation	• recreation opportunities day-use = 96,334 car camping = 25,166 • represent earth science features	• existing park
Fairbank	Recreation	• recreation opportunities day-use = 17,535 car camping = 45,937 • represent earth science features	• existing park
Maskinonje	Recreation	• none identified to date	• existing park
Halfway Lake	Natural Environment	• recreation opportunities day-use = 35,361 car camping = 62,623 back-country travel = 2,050	• existing park
Killarney	Wilderness	• recreation opportunities day-use = 48,134 car camping = 38,477 back-country travel = 17,600 • numerous earth science and cultural features	• existing park
Killarney Expansion	Wilderness	• recreation opportunities back-country travel = 34,100 • numerous earth and life science features	• recommend for park status
Lady Evelyn-Smoothwater	Wilderness	• recreation opportunities back-country travel = 1,000 (5% of the total) • numerous earth and life science features	• recommend for park status
Wanapitei	Natural Environment	• recreation opportunities day-use = 8,900 car camping = 40,000 • numerous earth and life science features	• recommend for park status
Sturgeon River	Waterway	• recreation opportunities back-country travel = 7,400 • numerous earth and life science features and cultural resources	• recommend for park status
French River	Waterway	• recreation opportunities back-country travel = 6,800 • numerous earth and life science features and cultural resources	• recommend for park status

be achieved within the areas identified as existing and candidate provincial park areas. Nature reserve and historical zones will be established in parks where significant sites have been identified for protection. For example, on the basis of study findings, 6 nature reserve zones and 3 historical zones have been proposed for Killarney Provincial Park.

- Areas of Natural and Scientific Interest: To date no ANSI's have been identified in the Sudbury District.

ANSI's are areas of land and water which contribute to the achievement of the Ministry's protection objective. Where ANSI's occur on public lands managed by the Ministry, the Ministry will ensure that the land uses and activities which occur provide for the protection of identified values. On private lands the Ministry will, through co-operation with others, attempt to ensure that landowners are aware of significant features on their properties and seek the owner's co-operation in protecting such features. The identification of ANSI's on private land does not indicate an intent of the Ministry to acquire that land or to restrain or prevent any use of private land.

9. TOURISM

a. Objective

To provide from public lands and waters, and to encourage on other lands and waters, a continuous contribution to the economy of the Sudbury area from tourism and its related industries provided that:

- the capacity of the supporting natural resource base is not exceeded; and,
- opportunities continue to exist for public use adjacent to urban centres and for general recreation use of the renewable resources by the local users.

b. Target

While no target has been assigned for tourism development, the Ministry may:

- permit Crown land disposition in certain areas for new commercial development proposals (including the expansion of existing tourist establishment facilities); and,
- assess the potential of the lakes listed in appendix C for commercial outpost camp development.

The Ministry of Natural Resources will also make a direct contribution to regional tourism through the provision of outdoor recreation opportunities as described in the Sport Fishing, Wildlife Recreation, Provincial Parks, Crown Land Recreation, and Cottaging Policies.

c. Strategy

- developing a District tourism strategy in conjunction with representatives from the tourist industry;
- ensuring that when Crown lands are considered for disposition that both the land base and the natural resource base are capable of supporting the expansion of existing or the development of new tourist facilities;
- increasing dialogue with the Ministry of Tourism and Recreation concerning the natural resource potential and public demand for the resource base of the District;
- assessing all applications, on a case-by-case basis, where the evaluation criteria will tend to favour those proposals which:
  - are complementary to existing development;
  - are centred about the major recreational features in the District; and,
  - are situated in areas having the natural resource capacity to support such use;
- attempting to locate any new Crown land camping and recreation facilities away from areas where significant conflicts with commercial tourism facilities may arise;
- encouraging full discussion of future commercial proposals to ensure that the concerns of all resource users and interest groups are duly expressed and considered;
- determining whether those lakes listed in appendix C have the potential for commercial outpost camp development:
  - through the lake planning program (also refer to the Cottaging Policy);
  - in accordance with the Access Roads and Modified Management Areas Policies; and,
  - according to The Rationale for the Selection of Tourism Lakes (appendix C);
- permitting outpost camp development on lakes affected by secondary and tertiary timber roads and existing road networks only after timber extraction activities, including scarification, have been concluded and roads within close proximity of a lake have been closed; and;
- disposing of commercial outpost camp sites by tender, auction, or draw to persons with a licensed base of operation.

d. Discussion

The tourist industry in the Sudbury area was first established in the French River and Killarney areas in the early 1900's. Tourists have been attracted to the Sudbury area primarily for the enjoyment of hunting and fishing opportunities.

In the northern third of the District, commercial recreation is dispersed and centred on hunting and fishing lodges and commercial outpost camp development. Lake Wanapitei also supports deep water boating opportunities while the area surrounding the City of Sudbury provides such services as: accommodation, supply and specialized day-use opportunities such as golf courses and ski hills. Youth camps, tent and trailer parks, cabins, cottages, hotels and motels are prevalent.
Of further note is the fact that Long, Ramsey, Richard, and McFarlane Lakes were heavily developed for cottaging and have been converted to residential development.

In the southern third of the District, situated within the area known as the North Georgian Bay Recreational Reserve, the waters of Georgian Bay and the North Channel, provide deep water boating and harbour opportunities which are among the best in the world. The Killarney area and the Georgian Bay shoreline provide hiking and boating opportunities for recreation enthusiasts.

The French River, West Arm of Lake Nipissing, Trout Lake and Nepewassi Lake are also attractive to commercial recreation facilities primarily for the boating and angling opportunities afforded by these waters.

As these activities rely heavily on the productivity and aesthetic values of the natural resource base, the policies of the Ministry of Natural Resources will continue to play a major role in influencing the commercial tourism industry in the Sudbury area.

10. WILDLIFE MANAGEMENT

The wildlife resource is managed to provide both recreational and commercial benefits. In addition to specific policies for wildlife recreation and fur production, there is also a need for a general policy related to wildlife management.

a. General

(i) Objective To provide optimum social and economic benefits to the residents and resource users of the Sudbury District, consistent with the maintenance of healthy wildlife populations.

(ii) Strategy

- identifying and protecting wildlife species and habitat to meet hunting and viewing demands;
- controlling the number of big game animals harvested in each wildlife management unit;
- identifying and protecting rare and endangered species of wildlife and their habitat;
- increasing desirable wildlife habitat by promoting the protection and maintenance of suitable habitat and implementing sound biological management practices to enhance habitat directly;
- encouraging the transfer of demand from certain game species (e.g. moose and deer) to other under-utilized species (e.g. bear);
- enforcing and encouraging adherence to relevant legislation affecting wildlife;
- providing hunting opportunities to residents of Ontario on a first priority basis;
- increasing non-resident tourist benefits for species under-utilized by Ontario residents;
- providing opportunities for increased appreciation of wildlife and its environment; and,
- allocating wildlife resources according to the following priorities:
  - maintenance and/or rehabilitation of the resource;
  - the resource rights of Treaty Indians;(11)
  - recreational benefits to the residents of Ontario; and,
  - the greatest economic benefits to Ontario.

(iii) Discussion Habitat is a major factor influencing wildlife populations. The size, physiological well-being and reproductive success of wildlife populations are largely dependent on the quality and quantity of food and cover available. The capability to produce habitat is related to soils and climate, since these affect the type, abundance and diversity of plant species present. Actual or existing habitat conditions are also dependent upon present land use.

Sound management practices must be implemented to achieve defined targets for wildlife production. The protection of suitable habitat and enhancement of areas heavily utilized by local game populations are critical to this effort. A high profile enforcement program is also required to minimize losses due to poaching.

The target for wildlife viewing permits an increase in participation consistent with population increases and the rising interest in this activity. To increase viewing opportunities, specific habitat may have to be maintained and site specific restrictions placed on wildlife harvesting.

b. Moose

(i) Objective To provide, through an increase in the moose herd size, opportunities for additional economic and recreational benefits.

(ii) Target To increase the herd size in the Sudbury District from approximately 1,990(12) to 4,050 moose and to increase the annual harvest from 260 to 700 moose by the year 2000 (table 7).

(iii) Strategy

- identifying, protecting, and managing all moose range and special habitat areas (e.g. moose wintering areas, aquatic feeding sites, and mineral licks);
- regulating the harvest to a biologically-sound level;
- attempting to redirect or redistribute hunting pressure to avoid under-utilization and over-harvesting in localized areas;
- maintaining and improving moose habitat through forest management or other resource activities;
- controlling predators in problem areas through such management techniques as trapping or through direct predator control measures, as the need arises;
- providing opportunities for viewing and photographing;
- enforcing relevant legislation to control illegal hunting activities; and,
- co-operating with Espanola, Temagami, North Bay and Parry Sound Districts which have management accountability for Wildlife Management Units 38, 40, 41, and 46, respectively.

(iv) Discussion During the past few years, approximately 4,200 hunters have come to the Sudbury District and harvested about 525 moose annually. This harvest rate is almost twice what the harvest level should be on an annual basis, if the target to the year 2000 is to be achieved. To achieve the target, no appreciable loss of hunting area or habitat can occur and a temporary reduction in hunting success rates may be experienced in short-term periods over the next 20-year period.

The Ministry will continue to co-ordinate the management of timber and wildlife resources, since the management unit boundaries for each activity do not coincide. Moose management in Sudbury District is a shared responsibility. Sudbury is responsible for Wildlife Management Units 39 and 42. These units were originally established on an ecological basis with regard to

TABLE 7 MOOSE POPULATION AND HARVEST

Wildlife Management Unit Number	Wildlife Management Units Managed by the Sudbury District					Wildlife Management Units within the Sudbury District(2)		
	Present Moose Population 1978-81	Present Allowable Harvest	Average Actual Harvest	Year 2000 Potential Moose Population (Target)	Year 2000(1) Potential Moose Harvest	Year 2000 Potential Moose Population (Target)	Year 2000 Potential Moose Harvest	Portion of Management Unit within the Sudbury District
38						40	5	1%
39	1,140	150	220	2,170	375	1,460	255	67%
40						175	30	5%
41						1,140	195	32%
42	850	110	250	2,210	385	1,235	215	56%
46						—	—	negligible
Total	**1,990**	**260**	**470**	**4,380**	**760**	**4,050**	**700**	—

(1) Potential harvest does not include moose from areas where general public hunting is not permitted (i.e. Indian Reserves, urban areas, and certain provincial parks).

(2) The following procedure was used to redistribute the accepted ***SLUP*** *population and harvest targets from the wildlife management unit (WMU) to District boundaries. The WMU landscape description lists were used to reallocate the 100 km² blocks to the appropriate districts. These blocks were summed by district and a percentage calculated for the proportions of each unit in a district. (For example, the 4,800 km² of WMU 42 represented 56 percent of the total WMU area.) The present moose population for each district was determined by calculating the average estimated mid-winter density for each WMU portion using the last three aerial inventories or most reasonable approximation. These densities were multiplied by the areas involved and the portions summed to produce a current moose population figure for each district. The year 2000 District population was determined by multiplying the* ***SLUP*** *WMU target population by the proportion of the WMU in the District. These figures were summed to produce a total district population target. The year 2000 harvest was calculated by multiplying 17 percent times the District population.*

access and human population centres and include most of the Sudbury District. All data collected on moose harvest and population levels in these two wildlife management units, including input to and review of forestry and other resource use proposals, is the responsibility of the Sudbury District.

The other Ministry administrative district offices of Espanola, Temagami, North Bay, and Parry Sound are responsible for the same management functions for the Wildlife Management Units 38, 40, 41, and 46 respectively. This situation requires liaison and program co-ordination between fish and wildlife and forestry personnel, in the district offices listed, to ensure adherence to the policy and strategies as outlined.

In the southern part of Wildlife Management Unit 42, moose compete with deer and elk, especially in the Burwash-French River area. Competition may eventually become the limiting population factor for all three species.

Predation of young moose calves, primarily by black bears and wolves, is a problem, especially in spring and summer. By promoting bear hunting as a major big game sport, perhaps this predation problem could be partially reduced.

The promotion of the viewing and photographing of moose should be improved in northern Ontario. People will be encouraged to travel into areas frequented by moose during the summer months. This would provide many hours of recreational enjoyment to the novice or professional photographer, as well as to the persons who have an appreciation for nature.

Poaching is a problem in certain areas within the Sudbury District.

c. Deer

(i) Objective To provide, through an increase in the deer herd size, opportunities for additional economic and recreational benefits.

(ii) Target To increase herd size in the Sudbury District from approximately 700(13) to 1,300 deer and the annual harvest from 140 to 150 deer, by the year 2000 (table 8).

(iii) Strategy

- protecting all deer yard areas and other important local deer habitat features such as salt licks, and travel corridors, wherever possible;
- adhering to the General Wildlife Management Policy;
- regulating the harvest in Wildlife Management Unit 42 by retaining the selective harvest system and issuing only a limited number of anterless deer permits;
- maintaining a closed season for deer in Wildlife Management Unit 39;

TABLE 8 DEER POPULATION AND HARVEST

Wildlife Management Unit Number	Wildlife Management Units Managed by the Sudbury District				Wildlife Management Units within the Sudbury District(2)		
	Present Deer Population 1978	Present Allowable Harvest 1978	Year 2000 Potential Deer Population (Target)	Year 2000(1) Potential Deer Harvest	Year 2000 Potential Deer Population (Target)	Year 2000 Potential Deer Harvest	Portion of Management Unit in Sudbury District
36					0	0	1%
39	100	10	100	15	40	5	40%
40					0	0	5%
41					0	0	32%
42	600	130	1,200	185	960	145	80%
46(3)					0	0	negligible
Total	**700**	**140**	**1,300**	**200**	**1,000**	**150**	—

(1) Potential harvest does not include deer from areas where general public hunting is not permitted (ie. Indian Reserves, urban areas, and certain provincial parks).

*(2) The following procedure was used to redistribute the accepted **SLUP** population and harvest targets from the wildlife management unit (WMU) to District boundaries. The 10 deer WMU's in this Region were subjectively divided, based on data for present and recent deer distributions, habitat conditions, etc., into District percentages. For example, in WMU 42, it was estimated that 56 percent of the **SLUP** population and harvest targets should belong to Sudbury District. In order to determine the year 2000 targets, these percentages were multiplied by the numbers listed in table 8 of the Regional **SLUP** document. The District WMU portions were summed and population and harvest targets calculated.*

(3) No data available.

- ensuring that deer habitat on both Crown and private lands is maintained or improved through forest management education, or other resource use activities;
- implementing a predator control program in problem areas as required;
- discouraging development, wherever possible, on private land where deer yards exist;
- encouraging user groups to view and photograph deer in their natural environment;
- increasing enforcement efforts to control poaching in problem areas;
- co-operating with Espanola, Temagami, North Bay, and Parry Sound Districts which have management accountability for Wildlife Management Units 38, 40, 41, and 46 respectively; and,
- producing and implementing a District deer management plan.

(iv) Discussion Sudbury District has very little suitable deer habitat. This is especially true in Wildlife Management Unit 39 where there is very little productive farmland or open grassland. In Unit 42, there is some farmland, but not enough to support a large deer population. Most deer wintering areas are considered to be of only marginal quality, due to the lack of good cover and the limited availability of usable winter browse. Special effort will be made to ensure that the existing deer yards are protected and improved wherever possible.

Espanola, Temagami, North Bay, and Parry Sound Districts are responsible for the same management functions for Wildlife Management Units 38, 40, 41, and 46 respectively. This situation requires liaison and program co-ordination between fish and wildlife and forestry personnel in the district offices listed to ensure adherence to the policy and strategies as outlined.

In 1979, approximately 450 hunters harvested approximately 50 deer in the Sudbury District. This harvest exceeded the calculated allowable harvest by approximately 10 animals. To achieve the year 2000 target, no appreciable loss of hunting area or deer habitat can occur and a temporary reduction in hunting success rates may be experienced in short-term periods over the next 20-year period.

For deer to again be plentiful in the Sudbury District, there would have to be a renewed interest in farming with more land cleared for agricultural purposes. In addition, the area would have to experience unusually mild winters and light snowfall for several years in succession.

With the introduction of the selective harvest system, the deer herd mortality rate could be controlled. If an effective predator control program can be implemented and poaching in problem areas eliminated, it should be possible to stabilize and increase the deer population in the District.

d. Elk (Wapiti)

(i) Objective To manage elk for the conservation and maintenance of the species and its habitat.

(ii) Target No attempt has been made to define a target for the hunting and viewing opportunities which could be realized from this big game animal because little is known about elk populations in Ontario. Management activity which results in an increase in the herd size by the year 2000 will be considered an achievement.

(iii) Strategy Sudbury District will attempt to manage the Burwash-French River elk range by:

- adhering to the General Wildlife Management Policy;
- maintaining a closed season on elk;
- maintaining and improving elk habitat through forest management or other resource use activities;
- conducting further research studies on the elk herd; and,
- increasing enforcement efforts to control illegal hunting activities.

(iv) Discussion Elk were introduced into Ontario in the 1930's and should not, therefore, be considered as native to the area. Elk were found in Ontario prior to 1900, but hunting pressure eliminated all of the native stock.

Very little is known about the elk herd found in an area running south from the former Burwash Correctional Institute to the French River. Past estimates have put the herd size at approximately 100 to 150 animals. An incomplete survey conducted in 1981 (abandoned due to weather) indicated that the present elk population is about half of the previous estimate. Much more research is required.

Elk are now protected in Ontario with a closed hunting season, year round. If the herd is to survive and prosper, the closed season concept will have to be maintained.

e. Black Bear

(i) Objective To increase the opportunities for black bear hunting and viewing.

(ii) Target To increase the annual harvest of black bear to the year 2000, from the current level of approximately 175 animals to approximately 330.

(iii) Strategy

- collecting information on bear habitat;
- adhering to the General Wildlife Management Policy;
- promoting black bear as a desirable big game resource to hunters and commercial outfitters;
- encouraging the harvest of bears in areas where they are a high nuisance factor;
- encouraging the public to photograph black bears in a safe manner;
- encouraging the total utilization of black bears taken by hunters;
- conducting more intensive surveys to collect accurate harvest information and specific biological data; and,
- producing and implementing a District bear management plan.

(iv) Discussion The sport of bear hunting is increasing in popularity across the District. There are 5 tourist outfitters and 3 private individuals who now derive a large portion of their yearly income by catering to bear hunters. Currently, it is believed that non-residents account for the largest portion of spring bear hunters. Some evidence does indicate that Ontario hunters are now demonstrating a new interest in this rewarding and inexpensive sport.

Predation of young moose calves by bears is believed to be a problem, especially in Wildlife Management Unit 39. By promoting bear hunting, this problem could partially be alleviated without any significant costs.

f. Waterfowl

(i) Objective To contribute towards meeting the continental demand for hunting and viewing opportunities.

(ii) Target No attempt has been made to define a target for waterfowl hunting and viewing opportunities as any attempt to increase the waterfowl harvest of any species requires the consideration of flyway and continental harvests and populations. Insufficient data also precludes an estimation of waterfowl populations and harvest potential at this time.

(iii) Strategy

- identifying waterfowl habitat;
- adhering to the General Wildlife Management Policy;
- producing, through management, sufficient waterfowl numbers to meet or surpass the local demand for hunting and viewing by:
  - locating and identifying important wetland habitat;
  - protecting present endangered productive habitat through the Crown Land Disposition Policy and the plan input and review program; and,
  - identifying and developing waterfowl viewing points;
- rehabilitating degenerated habitat; and,
- concentrating the enforcement effort on pre-season waterfowl hunting.

(iv) Discussion From a Provincial standpoint, Sudbury District does not offer a significant contribution to continental waterfowl populations. The areas that are presently being utilized by local waterfowl populations are generally not capable of accommodating large numbers of birds for any significant period of time.

According to local hunters, there appears to be sufficient habitat to support waterfowl to meet local hunting demand. Most of the preferred habitat for waterfowl is located south of the Vermilion River and along Georgian Bay. There are several small lakes and rivers where breeding pairs of ducks can be found during the spring and summer months.

g. Small Game

(i) Objective To manage small game in order to meet an increase in harvest demand by the year 2000.

(ii) Target No attempt has been made to identify a target for small game hunting opportunities since accurate information on small game hunting pressure and habitat is not sufficient to estimate small game population and harvest potential at this time.

(iii) Strategy

- identifying small game habitat;
- adhering to the General Wildlife Management Policy;
- obtaining accurate information on small game hunting pressure to estimate hunter demand and identifying land requirements for small game in a District wildlife management plan since habitat is species specific;
- improving population, habitat and harvest information and using it as a base for more specific management;
- encouraging landowners to preserve small game habitat;
- regulating seasons to ensure a healthy breeding population of small game; and,
- developing or maintaining usable habitat for small game species through sound management techniques.

(iv) Discussion Most small game species are hunted to varying degrees within the Sudbury District. The most abundant small game species found here are ruffed grouse, spruce grouse, and varying hare.

Small game populations usually fluctuate in cycles, creating considerable difficulty in accurately determining their numbers. More documentation is required to determine trends and to recognize signs indicating problems with small game wildlife populations.

Habitat loss is a major problem facing small game species. Clear-cutting of large forest areas as well as bulldozing of old fence rows in agricultural areas has resulted in significant habitat loss for many small game species. If this trend continues, wildlife populations may decline resulting in a loss of hunting and viewing opportunities to the sportsman. Suitable habitat areas must be identified and improved so that small game populations will increase or at least remain stable.

The annual regulation of the small game hunting seasons is something that should be considered when wildlife populations begin to decline. If the harvest is regulated properly, a sufficient breeding population can be maintained.

h. Non-consumptive Uses

(i) Objectives

- To prevent additional species from becoming endangered or threatened;
- To improve the status of existing endangered or threatened species with the objective of removing them from the endangered species list; and,
- To maintain populations of all wildlife species (both non-game and game) at levels sufficient to:
  - provide opportunities for recreational enjoyment, aesthetic appreciation, scientific investigation, educational uses;
  - provide benefits of tourism;
  - ensure environmental quality and ecosystem integrity; and,
  - ensure the safety of the public.

(ii) Strategies

- protect, conserve and manage all wildlife species (both non-game and game) on public and private lands, and to ensure the perpetuation of diverse high quality habitat;
- identify wildlife species according to the following two categories:
  - endangered, threatened or rare species; and,
  - populations of significant wildlife species (both non-game and game);
- protect or manage populations of these species if the best available scientific, social and economic data indicate that such action is necessary to achieve the above objectives;
- co-operate with other government agencies at the Federal, Provincial and Municipal levels, and with private landowners, developers and other members of the private sector to achieve the protection of all wildlife resources (both non-game and game);
- increase non-government participation in the identification and management of wildlife, in particular, endangered, threatened or rare species; and,
- provide extension services which promote an understanding of the value of wildlife resources (both non-game and game) and non-

consumptive uses, and which enhance social benefits and tourism.

(iii) Discussion

- Endangered, Threatened or Rare Species: One bald eagle nesting site, numerous heronries, and osprey nesting sites have been identified throughout the Sudbury District. These areas require special management consideration to prevent species disturbance of the adult birds, particularly during nesting seasons, with subsequent loss of the young, and to prevent habitat disruption or destruction caused during forestry operations or by recreationists (eg. boaters, snowmobilers), and as a result of the draining of wetland areas, for example. The identification of new endangered, threatened or rare species and their habitat will continue as more data and research permit.
- Significant Wildlife Species: Measures to improve populations of other significant wildlife in the District, namely elk, deer, moose, black bear, small game and waterfowl have been discussed in the previous sections.

i. Commercial Fur

(i) Objective To provide opportunities for additional social and economic benefits through increased utilization of the fur resource. Fur management will promote maintenance of healthy furbearer populations, species diversity and humane trapping practices.

(ii) Target To increase the number of furbearer pelts harvested in the District consistent with good furbearer management from 14,420 pelts to 17,400 pelts annually, by the year 2000. This includes an increase in the annual harvest of beaver to 8,100 and all other species to 9,300 pelts annually, by the year 2000.

(iii) Strategy Sudbury District will attempt to encourage the retention and proper management of all available Crown lands and waters and private lands in the District supporting furbearers by:

- continuing to monitor and update the data base on the capability for setting and assessing quotas for beaver and other furbearer species;
- continuing to co-ordinate the management of timber and wildlife resources;
- continuing to promote the practice of the most humane and efficient harvest methods by present and new trappers through the trapper education program;
- encouraging proper management and protection of furbearer habitat through education programs;
- enforcing quotas and legislation related to commercial fur management;
- continuing to work with local trapper councils to increase professionalism in the trapping industry;
- continuing to explain to the general public, the educational system, and interest groups, through public awareness programs, the role of furbearer harvesting, humane trapping methods and benefits of the fur industry; and,
- producing a commercial fur management plan for the District.

(iv) Discussion The primary furbearing animals in the District, in order of their economic importance, are beaver, muskrat, coloured fox, otter, and mink.

Commercial fur populations will be managed on an optimum use basis recognizing the annual fluctuations in populations of some species, market prices, and the number of trappers.

It is expected that increased harvest will result from increased efficiency rather than a major increase in the number of trappers.

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11. WILD RICE

a. Broad Objective

To provide sustained optimum social and economic benefits to the people of Ontario by stimulating the use and management of wild rice, recognizing its traditional significance and potential economic benefits to native peoples.

b. Objectives

- To provide a source of food for native peoples and other local residents;
- To allocate harvesting rights for personal use and commercial purposes, among all interested Ontario residents and corporations, consistent with the requirements of traditional users;
- To provide opportunities to increase the productive areas for cultivating wild rice and to enhance quality and yields, particularly in natural waters;
- To stabilize annual production; and,
- To improve the overall economic return to harvesters, processors, marketers, and others involved in the wild rice industry.

c. Targets

To increase the annual harvest and related benefits.

d. Strategy

Wild rice is not abundant in the District. Commercial and private potential for the harvest of wild rice is perceived to be limited. Existing stands and areas with potential for introduction of wild rice will be identified in detail as part of a wetlands inventory. Ministry management efforts will, therefore, be directed primarily at the protection and expansion of any identified wild rice stands to enhance waterfowl production.

- assessing potential through an investigation of the extent and stability of existing wild rice stands as well as the feasibility of introducing new stands;
- restricting the issuance of harvesting licences in areas where it would be in conflict with waterfowl management;
- discouraging shoreline and other development which would have an adverse impact upon wild rice stands; and,
- considering commercial and private proposals to increase productive areas for cultivating and harvesting wild rice on a case-by-case basis where biological conditions are suitable and where resource conflicts can be resolved.

e. Discussion

There is no wild rice industry in the Sudbury area. A few, small, scattered stands have been identified in the District, but the potential for the development of wild rice harvesting on a commercial scale is unknown.

12. SUMMARY OF TARGET ACHIEVEMENT

The following table summarizes the targets to be achieved in the Sudbury District by the year 2000. Some of the figures have been rounded, recognizing that a finite degree of preciseness at this broad level of detail is not realistic. The targets reflect the mix of resource activities to be carried out within the District. Strategies indicating how these various targets can be achieved have been discussed previously in the Resource Policies section.

TABLE 9 SUMMARY OF TARGET ACHIEVEMENT

Programs	District Targets by the Year 2000(1)
Aggregate Extraction	140 million tonnes
Agriculture	10,900 hectares of Canada Land Inventory Class 2, 3, and 4 cleared private land
Commercial Fishing	170,000 kilograms of commercial fish, annually
Cottaging	210 cottage lots
Forestry — conifer	AAC of 279,500 NMm^3 annually
— hardwood	AAC of 156,300 NMm^3 annually
Hunting — moose	Population of 4,050 animals by the year 2000
— deer	Population of 1,300 animals by the year 2000
— black bear	Harvest of 330 animals, annually
Mining — metallic and non-metallic minerals	While no mining target has been assigned to the Sudbury District, currently, 95 percent of the high, medium and low mineral potential Crown lands remain available for exploration
Provincial Parks	8,900 day-use opportunities 57,100 car camping opportunities 34,100 wilderness back-country travel opportunities 17,200 non-wilderness back-country travel opportunities
Sport Fishing	125,000 kilograms of sport fish, annually 41 prime (i.e. A_1 and A_2) lake trout lakes 81 designated (i.e. A_1, A_2, B_1 and B_2) lake trout lakes
Tourism	While no tourism target has been assigned to the Sudbury District, the Ministry will: • permit Crown land disposition in certain areas for new commercial development proposals (including the expansion of existing tourism facilities); and, • assess the potential of the lakes listed in appendix C for commercial outpost camp development
Trapping	8,100 beaver, annually 9,300 other species, annually

(1) *Targets expressed in this table were defined as targets assigned through the strategic land use planning process for achievement in the Sudbury District. These targets may differ from targets expressed in the* ***Northeastern Ontario Strategic Land Use Plan*** *for a number of reasons:*

- *In the* ***Northeastern Ontario Strategic Land Use Plan*** *timber and wildlife targets are expressed by management units which do not necessarily coincide with District administrative boundaries. District planning targets have been adjusted and expressed by District administrative boundary.*
- *Some* ***Strategic Land Use Plan*** *targets were expressed for the Region only and not apportioned to each district. Black bear harvests are an example. They were subsequently evaluated and assigned, by Region, to each District.*
- *Further analysis and refinement of the* ***Strategic Land Use Plan*** *targets has resulted in a redistribution of targets to districts. This is the case with the fur targets.*

D: land use areas — guidelines

The District has been divided into 21 separate areas (maps 2 and 3). The rationale for dividing the planning area into smaller resource management areas was based on the premise that the activity or mix of activities in one area is significantly different from that in adjacent areas or is to be carried out under different management conditions.

The format for presentation of each separate area consists of three parts:

a. Area Description
This part identifies the location of the area, the present use and level of development, major resource values, previous commitments (e.g. timber licences on Crown land) and known resource problems and issues.

b. Land Use Intent
This section defines the general role of the area and indicates, where applicable, the priority of uses permitted on Crown land. Where possible, specific reference has also been made to the Crown land disposition policy for the area.

c. Land Use Activity
This part lists the individual activities and types of development on Crown land as well as guidelines applicable for each type of use. Ministry concerns about private land uses are also noted, where applicable.

All areas are numbered for identification purposes. Each land use area activity form must be read in its entirety to determine the range of uses permitted and any applicable guidelines or conditions, having regard for the land use intent for the area in each case.

Where applicable, the primary and secondary uses are identified for each area. The term primary is used to convey the meaning of priority rather than intensity or abundance of use. Secondary means that a use is permitted so long as it does not conflict with the primary use of the area. Where there is a conflict in a specific area, the primary use will normally take precedence. However, there will be instances where the secondary uses (e.g. tourism) will require specific considerations in a particular portion of the area. This will require the primary use, often forestry, to adhere to the special guidelines such as the access roads, and MMA's.

Where there is an increasing conflict with the primary use, site specific negotiations between the conflicting parties and the Ministry will attempt to resolve the conflict. Expansion of existing uses will generally be considered where it will not conflict with other uses. For example, Crown land might be made available for an individual resort to expand if its own land base is inadequate. In some areas, certain uses will not be permitted to expand, Crown cottaging development for example, but existing cottage use would continue unaffected. In some instances, the Ministry may wish to phase out or alter existing uses. New or unanticipated land uses may be permitted on Crown land subject to individual assessment.

Uses on private land will not generally be objected to unless otherwise specified or restricted by legislation. The Ministry recognizes that its *Land Use Guidelines* have no legal status and that land use control of private land rests with the Ministry of Municipal Affairs and Housing or designated municipalities. There will be occasions when the Ministry deems certain land uses or proposed development on private land, while in conformance with municipal official planning documents, to have a negative impact on Ministry interests. In such situations, the Ministry will attempt to resolve any problems through discussions with the proponent, the municipality, and the Ministry of Municipal Affairs and Housing. If the Ministry is not satisfied with the results of the negotiations, further action may be considered under the *Planning Act* and in accordance with Ministry of Natural Resources policy. Where the *Land Use Guidelines* indicate that certain land uses should not take place on private land, the Ministry will generally adopt this position when making input to official plans or zoning by-laws and when providing comments on private proposals as circulated by the Ministry of

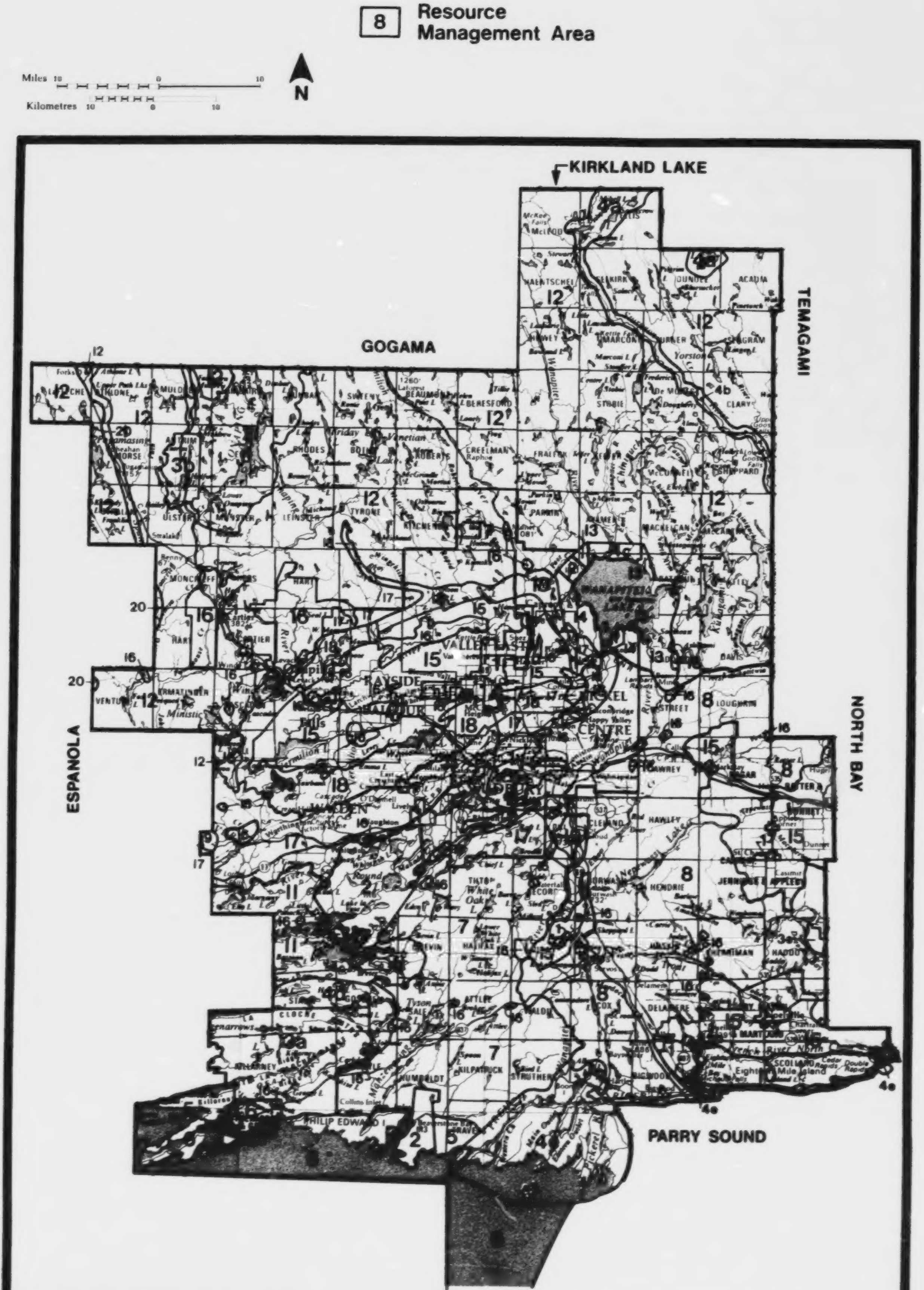
Municipal Affairs and Housing or municipalities. Such responses will, of course, be restricted to concerns within the mandate of the Ministry of Natural Resources.

Additional operational and development guidelines, such as those for access roads and MMA's, will be incorporated into resource management plans. Such guidelines will be designed to guide activities within each area to prevent or reduce any conflict with other uses, especially the primary and secondary land uses. When land tenure documents are granted, they will contain similar conditions.

While Indian Reserve lands are not subject to Provincial control, it is anticipated that development on Indian Reserves would be compatible with the intent established for the area adjacent to each Reserve.

Map 2

SUDBURY DISTRICT



1. URBAN AREAS

a. Area Description

This area includes all built-up urban areas and adjacent lands proposed for future urban growth, in Sudbury (i.e. the City of Sudbury, Richard and McFarlane Lakes, Long Lake, Copper Cliff and Coniston), Falconbridge, Skead, Capreol, Blezard Valley, Hanmer, McCrea Heights, Val Caron, Val Therese, Chelmsford, Azilda, Dowling, Onaping-Levack, Cartier, Lively, Naughton, Markstay, Hagar, St. Charles, Appleby Corners, Noelville, Ouellette, Alban, Estaire, Burwash, and Killarney.

None of these areas have been considered in the achievement of any Ministry program objectives, with the exception of some fisheries management program efforts in Ramsey and Nepahwin Lakes, the development of a few aggregate deposits on private land near Blezard Valley, and the mineral potential of the Sudbury Nickel Irruptive.

b. Land Use Intent

The Ministry will continue to encourage normal urban uses to develop in these areas according to approved official plans, secondary plans, zoning by-laws, zoning orders and planning strategies, as amended. Further, the Ministry will continue to co-operate with the Regional Municipality of Sudbury to ensure that:

- aggregate deposits are given priority for pit and quarry operations and related or dependent industrial uses. Other uses, such as agriculture, recreation, wildlife management, etc. which do not preclude future extraction will also be encouraged;
- the Nickel Irruptive and high and medium mineral potential lands are given priority for mining and mining-related activities. Other uses such as forestry, recreation, wildlife management, etc. which do not preclude future extraction will also be encouraged;
- in response to heavy sport fishing pressure, Ministry efforts to increase fisheries management in Ramsey and Nepahwin Lakes will continue, wherever feasible; and,
- existing sport fishing and hunting activities will continue to be encouraged according to regulations.

c. Land Use Activities for Area No. 1 — URBAN AREAS

Permitted uses will be determined by the various municipalities and where appropriate through approved planning documents.

2. INDIAN RESERVES

a. Area Description

The Wanapitei Indian Reserve No. 11 on the northwest shore of Lake Wanapitei, the Whitefish Lake Indian Reserve No. 6 on the north shore of Lake Penage, and the Pointe Grondine Indian Reserve No. 3 on Georgian Bay are included within this land use area.

b. Land Use Intent

The use of Indian Reserve lands comes under the direct administrative control of the Federal Government. Land uses within each Indian Reserve are, therefore, beyond the control of the Ministry of Natural Resources. For these reasons, Indian Reserves have not been considered in the achievement of any Ministry program objectives.

c. Land Use Activity for Area No. 2— INDIAN RESERVES

It is hoped that future development within Indian Reserves will be compatible with the intent for areas adjacent to each Indian Reserve. The Ministry will provide, at the request of the Federal Government or Indian Band Council, assistance in resource management where it is feasible and appropriate to do so.

By agreement with the Federal Government, the Ministry of Natural Resources is responsible for forest fire management on Indian Reserves.

3. PROVINCIAL PARKS

a. Area Description

These areas are existing Provincial Parks and are identified on maps 2 and 3 as follows:

Number	Name	Class
3a	Killarney	Wilderness
3b	Halfway Lake	Natural Environment
3c	Windy Lake	Recreation
3d	Fairbank	Recreation
3e	Maskinonje	Recreation

Killarney Provincial Park is an existing wilderness class park (34,421 hectares), situated on Highway 637 north of the Town of Killarney.

The white quartzite ridges of the LaCloche Mountains and the waters of the North Channel, Frazer Bay, Baie Fine, and the inland lakes provide a natural setting for wilderness back-country recreation. Activities include camping, canoeing, hiking, snowshoeing, and cross-country skiing.

Halfway Lake Provincial Park is a natural environment class park (4,703 hectares) which straddles the Highway 144 corridor west of Onaping Lake.

Halfway Lake has a large campground and several natural sand beaches and camping, swimming and picnicking are favourite activities enjoyed by park visitors. Motor boating, interior canoe tripping, hiking and back-country camping also occur in the summer months. Ice fishing, snowmobiling, cross-country skiing and snowshoeing are winter activities which occur on a limited basis. The recreation potential of the park is currently under-utilized, although day-use and car camping activities have experienced a recent increase.

Windy Lake Provincial Park is a recreation class park (139 hectares) situated along Highway 144, northwest of the Town of Onaping Falls. Picnicking, swimming, hiking, fishing, motor boating, waterskiing, sailing, canoeing, cross-country skiing, ice fishing and snowmobiling are popular activities. It also provides car camping opportunities in close proximity to Sudbury.

Fairbank Provincial Park is also a recreation class park (105 hectares) situated north of Highway 17, west of the City of Sudbury. Recreation opportunities include camping, picnicking, swimming, hiking, fishing, motor boating and snowmobiling activities.

Maskinonje Provincial Park is a recreation class park (936 hectares) situated on Highway 64, northeast of Noelville. No facilities have yet been developed.

b. Land Use Intent

These parks will continue to be managed according to existing policies and Ministry guidelines for their respective recreation, preservation and representative values.

The Ministry will reassess the value of Maskinonje Provincial Park within the guidelines of the Provincial Parks Systems Plan. In the event that the park does not reflect sufficient natural resource or recreational values to warrant its inclusion in the Provincial Parks System, it may be rescinded.

c. Land Use Activity for Areas No. 3a to 3e— PROVINCIAL PARKS

Permitted uses will be in accordance with existing policies and Ministry guidelines.

4a. LADY EVELYN-SMOOTHWATER

a. Area Description

Of the approximately 75,000 hectares which comprise the Lady Evelyn-Smoothwater candidate wilderness area, approximately 5,300 hectares are situated within the Sudbury District. The entire area is within the Bear Island Indian Caution.

The establishment of this area as a provincial park would contribute to about 5 percent of the wilderness back-country travel opportunities in the Sudbury District. Park status would also ensure the representation of the natural diversity of this part of Ontario including the high capability canoe tripping and hiking areas and special features associated with Maple Mountain in the Ishpatina Range, waterfalls, and nesting and archaeological sites throughout the entire candidate area.

b. Land Use Intent

This area is recommended for park status. It is recommended that the area be managed to provide for wilderness back-country recreation and the protection of outstanding natural and cultural values.

Due to the extensive area of this candidate park, it is further recommended that some uses be permitted to continue. An outline of those ongoing activities which are recommended for continuation is given in the land use activity section, however, it must be realized that in some instances further refinement may be required.

The mining rights to this area were withdrawn from staking in 1978 in response to the Indian Land Claim.

c. Land Use Activity for Area No. 4a—LADY EVELYN-SMOOTHWATER

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	Some aggregate may be extracted for maintenance of the Liskeard Lumber Road.
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	The existing recreation camps will be phased out in the long-term.
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining	x		It is recommended that mineral exploration/ extraction be permitted to continue.
Provincial Parks	x		Recommended for park status.
Roads		x	It is recommended that the Liskeard Lumber Road continue to provide access to the timber operations south of the park.
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Tourism	x		It is recommended that existing tourism activity be permitted to continue.
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

4b. STURGEON RIVER

a. Area Description

The candidate Sturgeon River waterway (5,500 hectares) extends from Stull Creek to Lower Goose Falls, a distance of some 60 kilometres. The area consists of the River and shoreline for a distance of 200 metres inland from the water's edge. It is located within Indian Land Claim.

The Sturgeon River has some lake sections and rapids, some scenic waterfalls and also some sections that meander. In two locations, the River passes through some forested sand dunes.

The River has excellent canoeing potential due to the variety of water conditions and scenery, however, at present it is only lightly used for canoeing, hunting and fly-in fishing. Fifty percent of the non-wilderness back-country travel targets for the District could be met in the area.

b. Land Use Intent

This area is recommended for park status. Public recreation, the preservation of the natural landscape and scientific research will be the main focus of management.

Currently, the candidate area includes those lands and waters within 200 metres of the River. Before the area comes into regulation, the boundaries will be clearly defined to better represent park values (including scenic vistas, unique vegetation, wildlife habitat, geological landform features, etc.) partially situated within or immediately adjacent to the candidate area.

Existing uses will be managed for the protection of park values. Due to the extensive area of the candidate park, and the nature of some of the existing uses, it is further recommended that some uses be permitted to continue. An outline of these ongoing activities which are recommended for continuation is given in the land use activity section, however, it must be realized that in some instances further refinement may be required.

The mining rights to this area were withdrawn from staking in 1978 as a result of the Indian Land Claim. No further Crown land disposition will be permitted.

c. Land Use Activity for Area No. 4b—STURGEON RIVER

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining	x		It is recommended that mineral exploration/ extraction be permitted.
Provincial Parks	x		Recommended for park status.
Roads	x		It is recommended that new roads and water-crossings be permitted. Applications will be reviewed on a case-by-case basis.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

4c. WANAPITEI

a. Area Description

This area encompasses 2,790 hectares on the north shore of Lake Wanapitei and contains glaciofluvial deltaic deposits and associated forest growth, a long sand beach, bluffs, shallow waters and the mouth of the north branch of the Wanapitei River.

The site has the potential to accommodate increasing demand for campground and picnic facilities which are becoming increasingly more evident in the area.

b. Land Use Intent

The area is recommended for park status. Public recreation, preservation of natural landscapes and scientific research will become the main focus of management. Development will largely depend on user demand. Before the area comes into regulation, the boundaries will be clearly defined. In some instances, the boundary may increase or decrease in size to better represent park values (including scenic vistas, unique vegetation, wildlife habitat, geological landform features, etc.) partially situated within or immediately adjacent to the proposed boundary.

Due to the popularity of the area, all existing recreational activities will be monitored to determine if controls (eg. length of stay, designating camping areas) are necessary to protect park values.

Due to the nature of some of the existing uses, it is further recommended that some uses be permitted to continue. An outline of these ongoing activities which are recommended for continuation is given in the land use activity section, however, it must be realized that in some instances further refinement may be required.

The surface and mining rights to the area were withdrawn in 1965 and 1969, with the exception of a few mining patents. Further Crown land disposition will not be permitted.

c. Land Use Activity for Area No. 4c—WANAPITEI

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	It is recommended that the existing cottages continue to be permitted. The Ministry may acquire these properties and include these lands within the provincial park area if they come on the market and policy and funding permit acquisition.
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining	x		It is recommended that mineral exploration/extraction be permitted. The Ministry may acquire patent properties if they become available and policy and funding permit acquisition.
Provincial Parks	x		Recommended for park status.

Activity	Acceptable Yes	 No	Recommended Guidelines
Roads		x	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping		x	
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

4d. KILLARNEY EXPANSION

a. Area Description

This area consists of 13,823 hectares, part of which extends into the Espanola District. It includes the outlying section of the main ridge of the LaCloche Mountains, and the Howry Creek and Mahzenazing River drainage basins. The area is undeveloped, with the exception of cottages along Carlyle and lower Johnnie Lakes. The main recreational activities are canoeing, hiking, interior camping, motor boating, fishing and hunting.

The area could contribute approximately 45 percent of the wilderness back-country travel opportunities in the District and permit the achievement of the wilderness representation requirement of the protection target for the Georgian Bay area, partially met in the existing Killarney Provincial Park area.

b. Land Use Intent

The area is recommended for park status as an extension to the existing Killarney Wilderness Provincial Park. Before the candidate is put into regulation, the boundaries will be clearly defined. In some instances, the boundary may increase or decrease in size to better represent park values (including scenic vistas, unique vegetation, wildlife habitat, geological landform features, etc.) partially situated within or immediately adjacent to the proposed boundary.

Due to the extensive area of this candidate park, and the nature of some of the existing uses, it is further recommended that some uses be permitted to continue. An outline of these ongoing activities which are recommended for continuation is given in the land use activity section, however, it must be realized that in some instances further refinement may be required. Wildlife management efforts will continue to place an emphasis on research on the moose and deer populations.

Surface and mining rights were withdrawn from the area in 1980, with the exception of a few mining patents. No further Crown land disposition will be permitted.

c. Land Use Activity for Area No. 4d—KILLARNEY EXPANSION

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	Bait fishing is a non-conforming use. It is recommended that the existing licences will be phased out in a manner which is least disruptive to the licence holder.
Commercial Fishing		x	
Cottaging		x	It is recommended that existing cottages continue to be permitted. The Ministry may acquire these properties if they come on the market and policy and funding permit acquisition. It is recommended that hunt camps be phased out.
Crown Land Recreation		x	
Forestry		x	
Hunting		x	It is recommended that hunting be permitted to continue but eventually be phased out.
Mining		x	Surface and mining rights were withdrawn in the area in 1980 with the exception of a few mining patents. Exploration will continue to be permitted

Activity	Acceptable		Recommended Guidelines
	Yes	No	
			on these patents. The Ministry may acquire these patents if they become available and policy and funding permit acquisition.
Provincial Parks	x		Recommended for park status.
Roads		x	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism	x		It is recommended that normal operations of the existing lodge on Bell Lake will continue to be permitted. Operations will be encouraged to occur in a manner which does not jeopardize adjacent park values.
Trapping		x	It is recommended that existing trapping activity be permitted to continue. The transfer of traplines and the development of additional trapline cabins will not, however, be permitted. In this manner, traplines will be phased out over time.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

4e. FRENCH RIVER

a. Area Description

This area (40,700 hectares) straddles the French River, extending approximately 100 kilometres from Georgian Bay, on Lake Huron in the Sudbury District, to Lake Nipissing in the North Bay District. It extends approximately 200 metres inland along both sides of the River.

The French River delta has the best known and most popular pickerel angling waters in the Province. These fisheries form the basis of the French River tourism industry. In addition, numerous plant and animal species not common to this part of Ontario, occur within the area. Remnants of the historical development of the area include sites of early habitation, historic fur trade use and other signs of early settlement.

The River provides excellent small craft boating and canoe tripping opportunities. Although there is considerable cottage and commercial resort development along the upper reaches of the River, there are sizeable areas where the natural setting is relatively undisturbed, due largely to the predominance of undeveloped Crown lands.

Recreational activities include sport fishing, motor boating, yachting, canoeing, camping, cottaging, commercial outpost camping and lodging. Numerous natural anchorages for small craft are found in the mouth area of the French River.

The natural and historical resources of the French River are of National, Provincial and Regional significance. The River was recommended as a candidate heritage waterway for designation in the Canada Heritage River System. This designation would be compatible with a waterway provincial park designation.

The area has the potential to provide about 50 percent of the non-wilderness back-country travel opportunities in the District and could fulfill the waterway representation requirement of the protection objective in this part of Ontario.

b. Land Use Intent

The area is recommended for park status. Due to the nature of the established recreational, commercial tourism and cottage uses, it is recommended that final designation of the area await completion of a comprehensive management study of the French River corridor. This study will provide a sufficient data base and analysis of park values to enable decisions to be made on final park boundaries and land use intent.

In the interim, it is recommended that the area be managed for public recreation and tourism activities associated with the preservation of the natural landscape for waterway recreation enjoyment and scientific research.

Existing private and commercial uses will continue to be permitted and encouraged to protect known park values.

Given the extent of the park proposal and the nature of existing uses, it is recommended that most of the existing land uses and activities within the area be permitted to continue even after the area is designated as a provincial park. An outline of those ongoing activities which are recommended for continuation, is given in the land use activity section, however, it must be realized that in some instances further refinement may be required.

Crown land disposition will only be considered in this area for the expansion of existing tourism establishments having regard for impact on park values and the general Crown Land Disposition Policy.

c. Land Use Activity for Area No. 4e—FRENCH RIVER

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing	x		It is recommended that existing bait fishing operations be permitted to continue.
Commercial Fishing	x		It is recommended that existing commercial fishing operations be permitted to continue.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Cottaging	x		It is recommended that existing cottage developments and hunt camps be permitted to continue.
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining	x		It is recommended that mineral exploration/ extraction be permitted to continue.
Provincial Parks	x		This area is recommended for park status subject to completion of the management study for the French River corridor.
Roads		x	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism	x		It is recommended that tourism activity be permitted to continue. The expansion of existing establishments will be considered, on a case-by-case basis, having regard for adverse effects on park values.
Trapping		x	It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to monitor the moose and elk populations frequenting this area to determine the actual extent of their habitat for population enhancement. Wildlife viewing opportunities are enhanced by the presence of a wide variety of game and non-game wildlife species.

5. FRAZER BAY/BEAVERSTONE BAY

a. Area Description

The scenic, rugged, rocky terrain and open stretches of water and small craft harbours in this area attract recreationists in the pursuit of motor boating, sailing, hiking, angling, hunting and viewing opportunities.

Though scenic, the shoreline has a low development potential, due to the lack of soils, which severely limits garbage and sewage disposal. Conflicts between sport and commercial fishermen have arisen primarily in the vicinity of the waters open to commercial fishing.

b. Land Use Intent

Public recreation will continue to be the primary use. Private recreation and commercial fishing activities are important secondary uses. Commercial aggregate, timber extraction and development, as well as further road access will be prohibited.

The mining rights to the lands under the waters of the Great Lakes were withdrawn from staking under an Order-in-Council in 1912 and the islands in Georgian Bay and the French River Mouth area were withdrawn under the *Mining Act* in 1926. In those areas not affected by the 1912 and 1926 withdrawals of the mining rights to the lands under the waters of the Great Lakes and the islands in Georgian Bay, including the French River mouth area, on-shore mining developments may expand underground, outward under the Great Lakes, subject to existing international agreements. In the remainder of the area, generally no further Crown land disposition will be permitted. Consideration may, however, be given for the expansion of the tourist industry in the Beaverstone Bay-Collins Inlet and Frazer Bay areas and the disposition of the 66-foot reserve in front of existing patents having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Any such development which would reduce or seriously degrade the habitat of the Killarney deer wintering yard, the largest in the Sudbury area, will not be permitted. Green Island, in Georgian Bay, will continue to be recognized as an important heronry. The island will remain under Crown ownership. Also, no Crown land disposition will be permitted in the vicinity of any deep water yachting and small craft harbours.

c. Land Use Activity for Area No. 5—FRAZER BAY/BEAVERSTONE BAY

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	There is no potential for agricultural production, therefore, prohibiting the viability of farm operations.
Bait Fishing	x		The existing level of activity will continue. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing	x		Existing operations will continue according to the conditions of each commercial fishing licence.
Cottaging		x	Existing seasonal residential development will continue to be permitted. No Crown land cottaging is proposed in this area.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry		x	Commercial timber harvesting is not permitted. Fuelwood harvesting, to satisfy local energy requirements, will be permitted in designated areas.

Activity	Acceptable		Guidelines
	Yes	No	
Hunting	x		Hunting will continue to be permitted according to regulation, except in the areas where life and property values may be endangered.
Provincial Parks		x	No provincial parks are proposed.
Roads		x	No new roads will be permitted.
Rural Residential		x	
Sport Fishing	x		In an effort to enhance the sport fishing opportunities in the area, efforts will continue in an attempt to establish a splake fishery in Georgian Bay.
Tourism	x		Existing commercial tourism establishments will continue to be permitted. Applications for the expansion of existing establishments or for new facilities will be reviewed, on a case-by-case basis, in the Beaverstone Bay-Collins Inlet and Frazer Bay areas only. Any such development, which would reduce or seriously degrade the habitat of the Killarney deer wintering yard, will be prohibited.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase the harvest to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	No commercial stands exist in this area and production capability is unknown, therefore, the viability of such development is unknown.
Wildlife Viewing	x		A large heronry on Green Island, in Georgian Bay, offers visitors a unique wildlife viewing opportunity. Fossil collecting is also a popular pastime. Wildlife management efforts will continue to focus on research and aerial moose and deer surveys on the Killarney Peninsula and Philip Edward Island in the interests of habitat enhancement and to increase the size of these populations and the number of viewing opportunities.

6. RUTHERFORD AND GEORGE ISLAND

a. Area Description

This area is situated within the area referred to as the North Georgian Bay Recreational Reserve. In addition to the commercial fishing port development at Killarney, commercial recreation establishments and seasonal recreation development occur throughout this area. Mineral and aggregate extraction occur in the form of a small scale surface pit and quarry operation on Badgeley Point and a silica quarry on Badgeley Island.

b. Land Use Intent

Recreation, mineral exploration and development, commercial tourism and commercial fishing activities will continue to be permitted. All other uses such as hunting, trapping, sport fishing and seasonal residential uses should neither preclude future resource extraction activities, nor the viability of the commercial tourism industry.

The bald eagle nest on Badgeley Island will continue to be recognized and protected under the authority of the *Endangered Species Act*.

The mining rights to the lands under the Great Lakes were withdrawn from staking in 1912 and the islands in Georgian Bay were withdrawn under the *Mining Act* in 1926. In those few areas not withdrawn from staking (e.g. Badgeley Island) onshore mining developments may expand underground, outward under the Great Lakes, subject to existing international agreements.

In the remainder of the area, consideration may be given, in keeping with the intent to maintain tourism as a primary use, to disposing of Crown land for additional private and commercial recreation development, including the expansion of existing tourist establishments, and the 66-foot reserve in front of existing patents. Each application will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Any such development which would reduce or seriously degrade the habitat of the Killarney deer wintering yard, the largest in the Sudbury District, will, however, be prohibited. No Crown land disposition will be permitted in the vicinity of any deep water yachting and small craft harbours.

c. Land Use Activity for Area No. 6—RUTHERFORD AND GEORGE ISLAND

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Any aggregate discovered in this area will be considered critical for meeting local needs. Commercial quarry operations will only be permitted on the aggregate deposit in Rutherford Township. Local wayside pits may only be developed in association with the regular construction of fuelwood access roads and other similar uses.
Agriculture		x	There is no potential for agricultural production.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	This area is currently closed to commercial fishing.
Cottaging		x	Existing activity will continue to be permitted. The expansion of cottaging development on private land may be permitted, on a case-by-case basis, pending the examination of the impact on Ministry programs and policy. No Crown cottage development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land

Activity	Acceptable		Guidelines
	Yes	No	
			Recreation Policy.
Forestry		x	Commercial timber harvesting is not permitted. Fuelwood harvesting to satisfy local energy needs will be permitted in designated areas.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered.
Mining	x		The commercial operations on Badgeley Island will continue to be permitted. Operating guidelines designed to protect fish and wildlife habitat and tourism values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		No new access roads are proposed. Temporary access for resource extraction and associated activities will be permitted under controlled conditions through licences and work permits.
Rural Residential	x		Existing activity will continue. Additional activity will only be permitted on Crown land according to the conditions of the Crown Land Disposition Policy.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation.
Tourism	x		Tourism development will continue to be permitted. Additional commercial lodge development, including both new proposals and expansions of existing operations, will be assessed, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts to increase harvest levels to achieve existing quotas will continue.
Urban Development		x	
Wild Rice Harvesting		x	No commercial stands exist in this area and production capability is unknown. The viability of such development is, therefore, unknown.
Wildlife Viewing	x		Wildlife management efforts will continue to focus on research and aerial moose and deer surveys in Rutherford Township in the interests of habitat enhancement and to increase the size of these populations, and the number of viewing opportunities.

7. WHITE OAK LAKE/TYSON LAKE

a. Area Description

This area is south of the City of Sudbury and includes the southern reaches of the Wanapitei River. Lands are primarily held under Crown ownership. Numerous areas are licensed under the *Crown Timber Act* to several small timber companies, primarily to supply wood-using mills in this portion of the District. Mineral aggregate extraction has occurred along the Highway 637 corridor.

Ontario Hydro operates the McVittie generating station on the Wanapitei River in the southwest corner of Secord Township. In conjunction with the Stinson and Coniston generating stations further upstream, Ontario Hydro provides hydro-electric power services for residential uses and mining industry needs in the Sudbury area.

With the exception of Tyson Lake (a B_2 type lake trout lake), the sport fishery is dominated by warm water fish species including pickerel, pike and bass. Several moose wintering areas have been identified throughout the area and wildlife management efforts will continue to monitor the deer, moose and elk populations in an attempt to increase population and harvest opportunities. Fisheries resources and the moose populations in some areas have been subjected to over-harvesting. This situation has been partly attributed to the relative ease of access provided by roads initially constructed for logging and mining purposes. This increased level of accessibility is also in conflict with the desire of some recreationists and tourist operators to maintain a natural environment recreation experience.

b. Land Use Intent

This area is part of the North Georgian Bay Recreational Reserve. Fish and wildlife management, in harmony with forest management, will dominate land use activities, in an attempt to ensure that fish and wildlife resources and associated recreation and tourism opportunities will be available in this portion of the District in the future. Any development which would reduce cover and browse will, therefore, not be encouraged on Crown land and not supported on private land.

Hydro-electric power generation in Secord Township at the McVittie site will continue to be a recognized land use activity on that segment of the Wanapitei River.

Crown land disposition will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Special conditions will apply in proximity to provincial park areas where management activities primarily associated with resource extraction for mining, logging and recreational uses will ensure that:

- inappropriate access and the degradation of park values inherent to Killarney Provincial Park, and the candidate Killarney Expansion and French River is prevented by developing the most appropriate road network and closely monitoring water access in waters bordering these areas; and,
- disposition of Crown land in Carylye, Goschen, Stalin, Struthers, Travers, Humboldt, and Allen Townships in proximity to park area boundaries is permitted only if impact on park values can be minimized.

c. Land Use Activity for Area No. 7—WHITE OAK LAKE/TYSON LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial aggregate extraction operations will continue to be permitted. No new commercial quarry operations will be permitted. Local wayside pits may be developed in association with such uses as the construction and maintenance of forest and mining access roads.
Agriculture		x	There is no potential for agricultural production.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.

Activity	Acceptable		Guidelines
	Yes	No	
Commercial Fishing		x	
Cottaging	x		Existing seasonal residential development will continue to be permitted. The potential for remote cottage development on lakes in Bevin, Halifax, Secord, Attlee, Kilpatrick, and Struthers Townships, identified in table 1, will be assessed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting operations will continue to be permitted, according to operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (eg. around logging operations).
Mining	x		Mineral exploration and development will continue to be permitted. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Having regard for the land use intent, those lands in proximity to Killarney Provincial Park, the candidate Killarney Expansion, and the candidate French River waterway, the most appropriate road system for both resource extraction and recreational uses will be developed in accordance with the access roads guidelines. All new secondary and tertiary timber access roads will be restricted to, wherever feasible, winter haul roads in an effort to reduce the impact of road construction and access on the fish and wildlife resources. Once timber extraction and regeneration activities have been completed, in each cutting area, all secondary and tertiary timber roads will be closed. Watercrossings over the Wanapitei River will be kept to a minimum.
Rural Residential	x		Existing rural residential development will continue to be permitted. The Ministry of Natural Resources will continue to support the Ministry of Municipal Affairs and Housing Policy concerning further residential development in the area

Activity	Acceptable Yes	 No	Guidelines
			covered by the *Minister's Zoning Order* in the Territorial District of Sudbury.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation.
Tourism	x		Existing tourism development will continue to be permitted. The potential for commercial outpost camp development will be assessed on those lakes identified in appendix C. Commercial lodge development, including both new proposals and the expansion of existing operations, will be considered, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will continue in an attempt to increase harvests to existing quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to focus on the monitoring and identification of moose, deer and elk habitat, in the interests of habitat enhancement and to increase population sizes, and the number of wildlife viewing opportunities.

8. NEPEWASSI LAKE/TROUT LAKE

a. Area Description

This area extends east of the Wanapitei River and is predominantly held under Crown ownership. Several blocks of land have been issued under licence to a few local timber operators, primarily to supply wood-using mills in the area.

Commercial tourism and seasonal residential development have focused on the recreational opportunities afforded by Trout and Nepewassi Lakes and the waters locally referred to as the West Arm of Lake Nipissing. This area is also part of an important migratory waterfowl nesting area.

The development potential of the West Arm of Lake Nipissing is partially limited by the lack of deep soils which restrict garbage and sewage disposal, and by flooding primarily associated with water fluctuations on Lake Nipissing. A study has been completed by Federal and Provincial government agencies under the Canada-Ontario Flood Damage Reduction Program, in an effort to prohibit development on flood prone lands.

b. Land Use Intent

This area is situated within the North Georgian Bay Recreational Reserve. Multiple use will continue to dominate the resource management efforts on Crown land throughout this area. Resource extraction for timber harvesting, mineral exploration and development, aggregate extraction, fish and wildlife management and general recreation will be the primary uses.

Disposition of Crown land will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. In that part of the Burwash elk range which extends into this area, and the Servos Township deer yard, any development which would reduce cover and browse will not be permitted on Crown land and not supported on private land. Similarly, any development which would reduce waterfowl habitat will be discouraged on Crown and private land. Several blue heron nesting sites have also been identified in this area.

c. Land Use Activity for Area No. 8—NEPEWASSI LAKE/TROUT LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial quarry operations will continue to be permitted. Any aggregate deposits discovered in this area will be considered critical to meet local area demand. Small deposits will be developed as local wayside pits; larger deposits will be designated under area 16.
Agriculture		x	The capability for agricultural production is considered to be too low to warrant the development of additional viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging	x		Existing seasonal residential development will continue to be permitted. The development potential for remote cottages will be assessed on Carrie, Dodd and Haddo Lakes.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land

Activity	Acceptable		Guidelines
	Yes	No	
			Recreation Policy.
Forestry	x		Commercial timber harvesting operations will continue to be permitted according to operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (eg. around logging operations).
Mining	x		Mineral exploration and development will continue to be permitted. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Road access will maintain low density public use. Guidelines under the Access Roads and MMA's Policy will be designed to ensure the protection of significant recreation and tourism opportunities and important fish and wildlife habitat.
Rural Residential	x		Existing rural residential development will continue to be permitted. The Ministry will continue to support the Ontario Ministry of Municipal Affairs and Housing Policy concerning further residential development in the area covered by the *Minister's Zoning Order* in the Territorial District of Sudbury, and the Strategy for the Corporation of the Townships of Cosby, Mason and Martland.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation.
Tourism	x		Existing tourism development will continue to be permitted, particularly in the West Arm of Lake Nipissing, Trout Lake and Nepewassi Lake areas. Commercial lodge development, including both new proposals and expansions of existing operations, will be considered, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	

Activity	Acceptable		Guidelines
	Yes	No	
Wildlife Viewing	x		Wildlife management efforts will continue to focus on research and aerial moose and deer surveys in the interests of habitat enhancement and to increase the size of the moose and elk populations, particularly in moose wintering areas in Hawley, Cleland, Burwash, Hendrie, Hoskin, Cherriman, Jennings, Cox and Delamere Townships. Opportunities for the viewing of these animals will be greatest in these areas.

9. GEORGIAN BAY

a. Area Description

Extending south from the outer limits of the Bustard Islands, this area includes the waters of Georgian Bay within the Sudbury District. These waters are important for commercial and recreational travel and fishing. Commercial fishermen from Parry Sound and Killarney fish these waters for whitefish, perch, chub, menominee and walleye. Commercial trading vessels and deep water recreational craft traverse these waters. The recreational boaters are primarily in search of the open stretches of water, spectacular scenery, and the excellent harbours scattered throughout the adjacent 30,000 Islands, French River Mouth-Georgian Bay shoreline, Killarney area, and the waters of the North Channel of Lake Huron.

b. Land Use Intent

A portion of this area is situated within the North Georgian Bay Recreational Reserve. Public recreation activities, including boating and sport fishing, and commercial fishing will continue to be the primary uses of these off-shore waters.

The mining rights to lands under the waters of the Great Lakes were withdrawn from staking by an Order-in-Council in 1912. No further Crown land disposition will be permitted in this area.

c. Land Use Activity for Area No. 9—GEORGIAN BAY

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing	x		All existing operations will continue according to the conditions prescribed in each commercial fishing licence.
Cottaging		x	
Crown Land Recreation	x		Existing activities will continue to be permitted.
Forestry		x	
Hunting		x	
Provincial Parks		x	No provincial parks are proposed.
Roads		x	
Rural Residential		x	
Sport Fishing	x		To enhance the sport fishery, efforts will continue to establish a splake fishery in Georgian Bay.
Tourism		x	
Trapping		x	
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Existing activities will continue to be permitted.

10. EIGHTEEN MILE ISLAND

a. Area Description

Eighteen Mile Island is located in Mason and Scollard Townships between the north and south channels of the upper French River. This area does not include that portion of the Island recommended for park status as the candidate French River waterway park (area 4e).

Constraints to development include property damage caused by water level fluctuations, and flood hazards or wave action along the length of the River. A study has been conducted by the Federal and Provincial Governments under the Canada-Ontario Flood Damage Reduction Program in an effort to identify the flood prone areas. The floodplain mapping will be used as a development control guide to prevent residential development in flood prone areas.

b. Land Use Intent

This area is situated within the North Georgian Bay Recreational Reserve and considered to be a buffer for the French River canoe route. Public and private recreation and tourism will be the dominant uses. Forestry, mining, wildlife management, bait fishing, etc. will continue as secondary uses as long as they do not degrade the recreational landscape or the resources upon which recreation and tourism depend.

The mining rights to the islands in the French River were withdrawn under the *Mining Act* in 1926. In the remainder of this area, Crown land disposition will not generally be permitted. Consideration may, however, be given to the expansion of existing tourist establishments in keeping with the intent to ensure the viability of tourism as a primary use in this area. Only the disposition of the 66-foot reserve in front of other existing patents will be permitted. Development will not be permitted on shoreland areas adjacent to critical spawning beds. Near osprey and heron nesting sites, special guidelines will be applied to ensure their protection.

It is recommended that this area be considered as part of the study designed to provide a management strategy for the comprehensive resource use of the corridor area, and to provide a sufficient data base and analysis of the values inherent to the candidate French River waterway area.

c. Land Use Activity for Area No. 10—EIGHTEEN MILE ISLAND

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		No commercial quarry operations will be permitted. Local wayside deposits will only be permitted for the regular construction of timber access roads and other similar uses.
Agriculture		x	The capability for agricultural production is currently considered to be too low to warrant the development of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, where supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing seasonal residential development will continue to be permitted. No further Crown land disposition will be permitted for cottage development and no Crown land cottaging development is proposed. On private land, the expansion of cottage development will be considered, on a case-by-case basis, having regard for impact on Ministry programs and flood damage protection,

Activity	Acceptable		Guidelines
	Yes	No	
			in particular.
Crown Land Recreation	x		Existing Crown land recreational activities will continue. No additional facilities will be provided, pending finalization of the Crown Land Recreation Policy and the decision regarding the status of the candidate French River waterway park.
Forestry	x		Commercial timber harvesting operations will continue to be permitted according to operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation.
Mining	x		Mineral exploration and development activity will continue to be permitted with the exception of the islands in the French River. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed. The Eighteen Mile Island wilderness area will be considered in the evaluation of areas for nature reserve park status.
Roads	x		In accordance with the proposed District roads strategy, no additional watercrossings will be permitted over the French River. Access for mineral exploration and timber harvesting will be permitted, subject to guidelines designed in accordance with the Access Roads and MMA's Policies and reflected in work permits. In the event that the decision is made to recommend the candidate waterway park for park status, the road network on the island will be reviewed.
Rural Residential	x		Existing rural residential development will continue to be permitted.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation. Fisheries management efforts will continue to ensure that the pickerel spawning beds in the north channel of the French River are monitored, and that regulations against poaching are strictly enforced, particularly during the critical spawning period.
Tourism	x		Existing tourism establishments will continue to be permitted. No additional commercial development will be permitted.

Activity	Acceptable		Guidelines
	Yes	No	
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to focus on the monitoring of elk range in this area for habitat enhancement purposes.

11. LAKE PENAGE

a. Area Description

Lake Penage has been classified as an A_2 type lake trout lake and is excellent for boating. Angling and cottaging capabilities are fairly good. Recreation related activities in the area include small craft boating, canoeing, warm and cold water sport fishing, camping, cottaging and several commercial tourist establishments, including a marina. The land use pattern on the lakeshore has been dictated by access, and many of the poorer sites have been developed more intensively than the higher capability cottaging or lodging sites. The Whitefish Lake Indian Reserve dominates the northwestern section of Penage Lake.

Several blocks of land have been issued under Crown timber licences to local companies primarily as sources of wood for mills in the southern half of the District.

This area is on the edge of a large moose wintering area centered in Bevin and Halifax Townships and at the extreme western edge of the elk range, which extends all the way to Eighteen Mile Island and the French River Mouth.

INCO Limited operates the Wabagishik generating station on the Vermilion River at Lorne Falls. This plant provides supplementary hydro-electric power to meet industrial needs. This will continue to be a recognized use. Water fluctuations resulting from the operation of the control dam on the lake have produced some minor complaints; nevertheless, the dam effectively maintains satisfactory water levels for fisheries and recreational purposes. Over the years, another obvious conflict has developed between cottagers and the quarrying operation on the south shore and the crushing operation on the north shore. Littering, the cutting of trees and vandalism have also resulted in conflicts between cottagers and day-use activities.

The Ministry prepared a lake plan for Penage for the period 1971 to 1981. The plan was designed to develop the lake to take full advantage of the best recreational capabilities, while maintaining environmental quality. The potential may exist for more cottage development and the Ministry has proposed further Crown land subdivision development as partial fulfillment of the cottaging target.

b. Land Use Intent

Lake Penage was included in the North Georgian Bay Recreational Reserve. Both private and public recreation, aggregate extraction, mining, hydro-electric power generation, and forestry, will continue to dominate land uses in this area in a multiple use setting. Where conflicts arise between recreation and resource extraction activities, the impact on recreation values will be minimized, wherever possible.

In those areas referred to as the Mineral, Industrial Mineral and Agricultural Reserves in the *Sudbury Regional Official Plan,* all other uses including urban, rural residential, forestry, wildlife management, etc. which do not preclude future extraction, may also be permitted.

The mining rights to the islands in Lake Penage were withdrawn from staking under the *Mining Act* in 1926. In the remainder of the area, Crown land disposition will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Special conditions will apply in proximity to provincial park areas where management activities, primarily associated with resource extraction, mining, logging, and recreational uses will ensure that:

- inappropriate access and the degradation of park values inherent to the candidate Killarney Expansion area is prevented by developing the most appropriate road network and closely monitoring water access in waters bordering this area; and,
- disposition of Crown land in Stalin and Goschen Townships will only be permitted, if impact on park values can be minimized.

c. Land Use Activity for Area No. 11—LAKE PENAGE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		New commercial quarry operations will not be permitted. On the north shore, the Ministry will continue to co-operate with the Regional Municipality of Sudbury to ensure that those areas identified as the Regional Industrial Mineral

Activity	Acceptable		Guidelines
	Yes	No	
			Extraction Area in the *Sudbury Regional Official Plan* are given consideration for aggregate extraction and related or dependent industrial uses. Local wayside aggregate deposits may be developed, but will be limited to the extraction of material required in the regular construction of timber access roads and other similar uses.
Agriculture	x		On those private lands with Canada Land Inventory Class 2, 3, and 4 capability for agricultural production, referred to in the *Sudbury Regional Official Plan* as the Agricultural Reserve, and required for food production under the Ministry of Agriculture and Food Provincial Food Land Guidelines, the Ministry will discourage any proposed uses not compatible with agricultural production.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging	x		Existing seasonal residential development will continue to be permitted. Further to the *Penage Lake Management Plan*, the Ministry has proposed additional Crown land cottage subdivision development.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy and amendments to the *Penage Lake Management Plan.*
Forestry	x		Commercial timber harvesting will continue to be permitted according to the operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development activity will continue to be permitted in those areas not withdrawn from staking. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.

Activity	Acceptable		Guidelines
	Yes	No	
Roads	x		Having regard for the land use intent, the most appropriate road system for both resource extraction and recreational uses will be developed in accordance with the proposed District roads strategy in Stalin and Goschen Townships. No permanent road access will be permitted along the south shore of Lake Penage. All new timber access roads will be limited to winter road construction standards in an effort to reduce the impact of road construction and access on fish and wildlife resources. Once timber extraction and regeneration activities have been completed in each cutting area, all secondary and tertiary timber roads will be closed.
Rural Residential	x		Existing rural residential development will continue to be permitted. This Ministry will continue to co-operate with the Regional Municipality of Sudbury to discourage new rural residential development on those lands identified as part of the Industrial Mineral Extraction Area and Agricultural Reserve within this area.
Sport Fishing	x		Angling will continue to be permitted according to regulation.
Tourism	x		Existing tourist establishments will continue to be permitted. Commercial lodge development, including both new proposals and expansions of existing operations, will be assessed, on a case-by-case basis, with regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		This area is on the extreme western edge of a large moose wintering area centered in Bevin and Halifax Townships, and the elk range which extends all the way to Eighteen Mile Island and the mouth of the French River. Wildlife management efforts will continue to focus on research and aerial surveys in the interests of habitat enhancement and population increases, particularly in Cain and Bevin Townships. Wildlife viewing opportunities of these animals will be enhanced by these efforts.

12. POGAMASING LAKE/VENETIAN LAKE/MASKINONGE LAKE

a. Area Description

Existing activities include mineral exploration and development, timber management, trapping, commercial fishing, aggregate extraction and commercial lodge and outpost camp developments. The fish and wildlife resources and the rugged terrain have attracted fishermen and hunters to this area for many years. A large number of the lake trout lakes in the Sudbury District are also situated in this area.

Fisheries resources and the moose populations in some areas have been subjected to overharvesting, attributed in part, to the relative ease of access provided by roads constructed for logging and mining purposes. This accessibility is regarded as being in conflict with the desire of recreationists and tourist operators to maintain a natural environment recreation experience.

All of the area lying west of a line extended northward along the eastern boundaries of Creelman and Beresford Townships is held under a Crown Timber Licence to E. B. Eddy Forest Products Limited. This area is being managed under a Forest Management Agreement, signed in 1980 between the Ministry of Natural Resources and the Company, until 1999. Much of the remainder of the area is held under Crown Timber Licence to Poupore, Cockburn, and Goulard Lumber Companies.

One licence has been issued for commercial fishing on Paradise (Alphretta) Lake, primarily for harvesting whitefish.

b. Land Use Intent

Resource extraction will continue to be the primary use with fish and wildlife management and public recreation the important secondary uses. These uses will all occur in a multiple use setting. Additional remote tourism development will be considered together with limited public recreation opportunities.

Until the Bear Island Indian Caution is resolved, Crown land disposition will be prohibited in the twelve townships affected by the Caution. Also, no further disposition of Crown land will occur in those portions of Venturi, Hart and Moncrieff Townships required by INCO Limited for either the dam or head pond should the decision be made to develop the hydro-electric power potential of the Spanish River. In the remaining parts of this area, disposition may be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Special conditions will apply, however:

- in proximity to provincial park areas where management activities primarily associated with resource extraction for mining, logging, and recreational uses will ensure that:
    - inappropriate access and the degradation of park values inherent to Halfway Lake Provincial Park, and the Wanapitei, Lady Evelyn-Smoothwater, and Sturgeon River candidates is prevented by having regard for the most appropriate road network and closely monitoring water access in waters bordering these areas; and,
    - any disposition of Crown land in townships in proximity to these park areas is permitted only if the impact on park values can be minimized;
- in proximity to osprey and heron nesting sites where special guidelines will be applied to ensure their protection; and,
- along that section of the Wanapitei River in Aylmer Township where shoreland development will not be permitted, in order to protect the pickerel spawning beds from degradation or destruction, due to erosion and sedimentation.

c. Land Use Activity for Area No. 12—POGAMASING LAKE/VENETIAN LAKE/MASKINONGE LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing aggregate extraction operations will continue to be permitted. New commercial quarry operations will not be permitted. Local wayside pits may be developed in association with such uses as the construction and maintenance of forest access roads.

Activity	Acceptable		Guidelines
	Yes	No	
Agriculture		x	The capability for agricultural production is too low to permit the establishment of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing	x		Commercial fishing on Paradise (Alphretta) Lake will continue for the harvest of whitefish, according to the conditions prescribed in the licence.
Cottaging	x		Existing seasonal residential development will continue to be permitted. Once all cottage lots available through subdivision development on Lakes Maskinonge, Onaping, and Penage have been identified, the potential for remote cottage lot development will be assessed on those lakes situated within this area as listed in table 1. The potential for remote cottage development on those lakes affected by the Bear Island Indian Caution will be delayed pending the resolution of that issue. Crown land cottage subdivision development is proposed on Maskinonge Lake. A cottage lake plan has been completed by the Ministry of Natural Resources and approved by the Ministries of the Environment and Municipal Affairs and Housing for an estimated 50 cottage lots. The cost of constructing a road to the identified sites may alter the feasibility of this proposal.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development activity will continue to be permitted in those areas not withdrawn from staking, or under the Indian Caution. Operating guidelines for the protection of fish and wildlife habitat and recreation and tourism values will be reflected in licences and work permits.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Having regard for the land use intent, the most appropriate road system for both resource extraction and recreational uses will be developed. Pursuant to the terms and conditions of the Forest Management Agreement, the area west of a line formed by the eastern boundaries of Creelman and Beresford Townships, access roads will be open to the public and constructed to a standard to permit all-weather access. Normal existing public access and recreational uses will continue. When timber access roads are constructed in the vicinity of the brook trout waters in Ermatinger and Cascaden Townships, every effort will be made to avoid water-crossings. In the event that crossings are necessary over Pumphouse, John and/or Cameron Creeks, direction will be provided by Ministry staff. Watercrossings over designated canoe routes on the Vermilion and Wanapitei Rivers will be kept to a minimum and, wherever possible, temporary in nature. Once timber extraction and regeneration activities have been completed in each cutting area, all secondary and tertiary timber roads will be closed to permit fish and wildlife populations to increase. An exception may be made for those secondary timber access roads which would access the proposed Crown cottage subdivision development sites on Maskinonge Lake. Should Crown subdivision development be approved, then these roads could remain.
Rural Residential	x		Existing rural residential development will continue to be permitted. The Ministry of Natural Resources will continue to support the Ontario Ministry of Municipal Affairs and Housing Policy concerning further residential development in those townships covered by the *Minister's Zoning Order* in the Territorial District of Sudbury.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation. The Ministry has identified the need for more intensive fisheries management in those lake trout lakes within the sphere of influence of fume damage, to react to the impact of acid rain on these fragile fisheries populations and habitat. Particular emphasis will be placed on the A_1 and B_1 type lakes in Turner, Seagram, Stobie, Demorest, Clary, Telfer, McConnell, Sheppard, Kitchener, Aylmer, McCarthy and Kelly Townships, and the A_2 and B_2 type lakes in Kelly and Davis Townships.
Tourism	x		Existing tourism development will continue to be permitted. The potential for commercial outpost

<table>
<tr><th rowspan="2">Activity</th><th colspan="2">Acceptable</th><th rowspan="2">Guidelines</th></tr>
<tr><th>Yes</th><th>No</th></tr>
<tr><td></td><td></td><td></td><td>camp development will be assessed on those lakes identified in appendix C. Additional commercial lodge development, including both new proposals and expansions of existing operations, will be assessed, on a case-by-case basis, having regard for impact on Ministry programs.</td></tr>
<tr><td>Trapping</td><td>x</td><td></td><td>Trapping will continue to be permitted. Efforts will be made to increase harvest levels to achieve assigned quotas.</td></tr>
<tr><td>Urban Development</td><td></td><td>x</td><td></td></tr>
<tr><td>Wild Rice Harvesting</td><td></td><td>x</td><td></td></tr>
<tr><td>Wildlife Viewing</td><td>x</td><td></td><td>Wildlife management efforts will continue to include recognition of the special habitat requirements of moose in this area. An emphasis will be placed on research and aerial moose surveys in the interests of habitat enhancement and population increase, particularly in Leinster, Harty, Foy, Botha, Roberts, Creelman, Tyrone, Kitchener, Hutton, McLeod, Haentschel, Grigg, Stobie, Fraleck, Telfer, Aylmer, McConnell, Mackelcan, and McCarthy Townships. Existing viewing activities will be enhanced by these efforts.</td></tr>
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13. LAKE WANAPITEI

a. Area Description
Lake Wanapitei has been identified by this Ministry as an A_2 type lake trout lake. It is also one of the sources of fresh water for the Regional Municipality of Sudbury. It provides an excellent base for recreational activities, including small craft boating, canoeing, cottaging, warm and cold water sport fishing, camping and bathing. The majority of the shoreline is held under Crown ownership.

Access is provided by logging and cottaging roads, the Canadian National Railway line and two Federal Government docks at Boland's Bay and Portage Bay, and numerous water access points, all of which have influenced the pattern of land use around the lake. Land use activities including seasonal residential development, mineral exploration and development and aggregate extraction have increased in this area in the past few years. Timber harvesting will continue, through to the year 2000, by companies providing wood to mills in the Sudbury area. Commercial fur trapping and commercial fishing for whitefish in Lake Wanapitei also occur.

Another important use of the Lake is made by Ontario Hydro. A dam at the south end of Outlet Bay controls water levels on the Lake for hydro-electric power generation purposes for the Stinson, Coniston, and McVittie generating stations downstream on the Wanapitei River.

Thin soils, flood hazards and wave damage along the shoreline place constraints on seasonal residential development as well as garbage and sewage disposal facilities. Garbage, water pollution and sand bluff erosion problems on the north shore of the Lake have also been identified.

b. Land Use Intent
Public and private recreation, timber harvesting and commercial fishing will continue to be the primary uses. Fish and wildlife management, in harmony with timber management, will ensure protection of the fish and wildlife resources upon which recreation opportunities are dependent. Where conflicts occur between recreation and resource extraction activities, the impact on recreation values will be minimized, wherever possible.

Mining rights to the islands in Lake Wanapitei were withdrawn from staking under the *Mining Act* in 1926. Since 1976, the mining rights to the lands under the waters of Lake Wanapitei have been withdrawn with the exception of a few older mining patents and claims. This practice of withdrawing the lake bottom from staking will continue in the interests of protecting the water supply for the City of Sudbury. The Ministry is aware of proposed drilling and other exploration programs being considered by the mining industry in a search for uranium ore under the waters of Lake Wanapitei. Since the City of Sudbury draws its water, in part, from the Lake and for other environmentally-related concerns, the Ministry will exert a close scrutiny on development in the area. Therefore, all withdrawn lands will be retained under Crown ownership until critical standards for the development of the area are established.

Crown land disposition throughout the remainder of the area will be considered, on a case-by-case basis, having a regard for impact on Ministry programs and the general Crown Land Disposition Policy. Special conditions will apply in proximity to provincial park areas where management activities, primarily associated with resource extraction, mining, logging, and recreational uses will ensure that:

- inappropriate access and the degradation of park values inherent to the candidate Wanapitei natural environment area is prevented by developing the most appropriate road network and closely monitoring water access in waters bordering this area; and,
- disposition of Crown land in Rathbun Township will only be permitted if impact on park values can be minimized.

It is recommended that the Ministry of Natural Resources and the Regional Municipality of Sudbury pursue the possibility of a joint lake management plan for this area and area 14. WEST LAKE WANAPITEI.

c. Land Use Activity for Area No. 13—LAKE WANAPITEI

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		**Existing quarry operations will continue to be permitted. New commercial operations will be**

Activity	Acceptable Yes	Acceptable No	Guidelines
			prohibited. Local wayside deposits may be developed for the extraction of material required in the construction of timber access roads and other similar uses.
Agriculture		x	The capability for agricultural production is considered to be too low to currently warrant the establishment of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing	x		A commercial fishing licence will continue to be issued on Lake Wanapitei primarily for the harvest of whitefish, according to the conditions specified in the licence.
Cottaging		x	Existing seasonal residential development will continue to be permitted. Cottage development on private land will be assessed, on a case-by-case basis, having a regard for impact on Ministry programs. No Crown cottage development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy. No further Crown land recreation facilities will be provided in Rathbun Township.
Forestry	x		Commercial timber harvesting will continue to be permitted according to operating and annual plans, which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development activity will continue to be permitted in those areas still open for staking. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits. The long-term intention is to phase out lake bottom exploration and mining activity over time by continuing to withdraw the mining rights.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Having regard for the land use intent, the most appropriate road system for both resource extrac-

Activity	Acceptable		Guidelines
	Yes	No	
			tion and recreational uses will be developed in accordance with the proposed District roads strategy. Once timber extraction and regeneration activities have been completed in each cutting area, all secondary and tertiary timber roads will be closed to permit fish and wildlife populations, particularly moose, to increase. Watercrossings over designated canoe routes will be kept to a minimum.
Rural Residential		x	
Sport Fishing	x		Angling will continue to be permitted. The Ministry has identified the need for more intensive fisheries management in Lake Wanapitei in response to the impact from acid rain.
Tourism	x		New commercial lodge development will be considered, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to focus on research and aerial moose surveys in the interests of habitat enhancement and population increase, particularly in Scadding, Street, and MacLennan Townships and on the Wanapitei Indian Reserve No. 11.

14. WEST LAKE WANAPITEI

a. Area Description
This area is accessed by a number of roads, the Canadian National Railway line and two Federal Government docks at Boland's Bay and Portage Bay, as well as numerous water access points, all of which have influenced the pattern of land uses around the Lake. Land use activities, including mineral exploration and development in the southeastern and northeastern areas, have increased in the last few years. Aggregate extraction has also occurred. The area is predominantly held under private ownership.

A number of small, scattered, private parcels, including some islands in West Bay and Portage Bay, are used primarily for summer cottages and commercial tourist establishments. A few mining operations occur in Scadding, Rathbun and Norman Townships.

Thin soils, flood hazard and wave damage along the shoreline place constraints on seasonal residential development and garbage and sewage disposal. Garbage, water pollution and sand bluff erosion problems on the north shore of the Lake have also been identified.

b. Land Use Intent
Public and private recreational uses and forestry will continue to dominate the land uses in this area. Within that area referred to as Industrial Mineral Extraction Area in the *Regional Official Plan for Sudbury*, other uses, including urban, rural residential, forestry, wildlife management, etc. which do not preclude future extraction, may also be permitted. Where conflicts occur between recreation and resource extraction activities, the impact on recreation values will be minimized, wherever possible.

Mining rights to the islands in Lake Wanapitei were withdrawn from staking under the *Mining Act* in 1926. Since 1976, the mining rights to the lands under the waters of Lake Wanapitei have been withdrawn with the exception of a few older mining patents and claims. This practice of withdrawing the lake bottom from staking will continue in the interests of protecting the water supply for the City of Sudbury. The Ministry is aware of proposed drilling and other exploration programs being considered by the mining industry in a search for uranium ore under the waters of Lake Wanapitei. Since the City of Sudbury draws its water, in part, from the Lake and for other environmentally-related concerns, the Ministry will exert a close scrutiny on development in the area. Therefore, all withdrawn lands will be retained under Crown ownership until critical standards for the development of the area are established.

Crown land disposition throughout the remainder of the area will be considered, on a case-by-case basis, having a regard for impact on Ministry programs and the general Crown Land Disposition Policy. Also, special guidelines for any development and resource management activities in proximity to the heronry in Norman Township will be formulated to ensure its protection.

It is recommended that the Ministry of Natural Resources and the Regional Municipality of Sudbury pursue the possibility of a joint lake management plan for this area and area 13. LAKE WANAPITEI.

c. Land Use Activity for Area No. 14—WEST LAKE WANAPITEI

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial operations will continue to be permitted, including the development of those lands identified in the *Official Plan for the Regional Municipality of Sudbury* as part of the Industrial Mineral Extraction area. No new commercial aggregate operations will be permitted. Local wayside pits may be developed for the extraction of material required in the construction of timber access roads and other similar uses.
Agriculture		x	The capability for agricultural production is considered to be too low to warrant the establishment of viable farm operations.

Activity	Acceptable		Guidelines
	Yes	No	
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing seasonal residential development will continue to be permitted. Additional cottage development on private land will be considered, on a case-by-case basis, having regard for impact on Ministry programs. No Crown land cottage development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to the operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development activity will continue to be permitted in those areas still open for staking. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits. The long-term intention is to phase out lake bottom exploration and mining activity over time by continuing to withdraw the mining rights.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		The Access Roads and MMA's Policies will be enhanced to ensure the protection of recreation values and fish and wildlife habitat, wherever additional roads are required.
Rural Residential	x		Existing rural residential development will continue to be permitted. This Ministry will continue to co-operate with the Regional Municipality of Sudbury to discourage new rural residential development on those lands identified as part of the Industrial Mineral Extraction Area. The Ministry will also continue to provide input and support for the *Official Plan for the Regional Municipality of Sudbury* and associated secondary plans, as amended.

Activity	Acceptable		Guidelines
	Yes	No	
Sport Fishing	x		Angling will continue to be permitted according to regulation.
Tourism	x		Existing tourism related activities will continue to be permitted. New commercial lodge development proposals will be reviewed, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will continue in an attempt to increase harvests to achieve quota levels.
Urban Development	x		Urban development will continue to be permitted. The Ministry will continue to support the *Official Plan for the Regional Municipality of Sudbury* and associated secondary plans, as amended.
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to focus on research and aerial moose surveys in the interests of habitat enhancement and population increase, particularly in Capreol Township.

15. BLEZARD VALLEY/HAGAR-ST. CHARLES/ALBAN-NOELVILLE/BURWASH/WANUP

a. Area Description

There are three major and two minor soil areas in the District having a high capability to support agricultural production. The major areas are:

- the Blezard Valley area in the Sudbury Basin, where Canada Land Inventory capability for agricultural production is moderately high (Class 2 to Class 5) and there are only moderate limitations restricting the range of crops;
- the Hagar-St. Charles area which has smaller areas of moderately high capability for agricultural production (Class 2 to Class 5); and,
- the Alban-Noelville area, in Cosby, Mason and Martland Townships, situated within the North Georgian Bay Recreational Reserve, which has a slightly lower capability for agricultural production (Class 3 to Class 6) in scattered areas.

The minor areas are:

- the Burwash area dominated by moderate capability sites (Class 2 to Class 7) which are relatively small in overall area and primarily developed in association with the former Provincial and Federal correctional facilities at Burwash and Camp Bison; and,
- the Wanup area which has smaller areas of moderate capability for agricultural production (Class 2 to Class 7).

These areas primarily support the production of beef and dairy cattle and forage crops to supply local markets. The Blezard Valley area also produces some cash crops, such as potatoes and other vegetables.

Private land holdings are extensive within these areas and several municipalities can control land use under the *Planning Act.*

Numerous small areas of land in each of these areas have been issued under Crown timber licences to a number of small timber operators, primarily to supply local wood-using mills.

Mineral aggregate extraction has usually occurred along the major highway corridors and close to concentrations of urban, rural and seasonal residential development.

Several moose wintering areas have been identified throughout these areas. Wildlife management efforts will continue to monitor the deer, moose, and elk populations in the interests of increasing wildlife management populations and harvest opportunities.

b. Land Use Intent

Agriculture and rural residential development will continue to be the primary land uses. Wood production for local use, fish and wildlife management, general recreation, tourism and cottaging are all important secondary uses.

Crown land disposition may be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Also, special guidelines for any development and resource management activities in proximity to the osprey nesting site in Fairbank Township will be prepared to ensure its protection. Any development proposals in the waterfowl nesting areas in the Nickel Valley and on the West Arm of Lake Nipissing will be subject to a thorough review to ensure the protection of these important wetland areas.

c. Land Use Activity for Area No. 15—BLEZARD VALLEY/HAGAR-ST. CHARLES/ALBAN-NOELVILLE/BURWASH/WANUP

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial quarry operations will continue to be permitted. No new commercial operations will be permitted, except in the following two areas: • Blezard Valley Area where this Ministry will continue to co-operate with the Regional Municipality of Sudbury to recognize those lands collectively referred to as the Industrial Mineral Extraction area in the *Official Plan for the Regional Municipality of Sudbury*; and, • the area east of St. Charles, encompassing

Activity	Acceptable		Guidelines
	Yes	No	
			virtually all of Dunnet Township and portions of Appleby and Casimir Townships. If aggregate shortages occur, it may be necessary to develop these deposits. The Ministry will ensure aggregate removal with subsequent rehabilitation. Local wayside aggregate deposits may be developed, but will be limited to the extraction of material required in the regular construction of timber access roads and other similar uses.
Agriculture	x		This Ministry will continue to co-operate with the Regional Municipality to ensure that any proposed uses for those private lands with Canada Land Inventory Class 2, 3 and 4 capability for agricultural production, collectively referred to as the Agricultural Reserve in the *Official Plan for the Regional Municipality of Sudbury,* required for food production under the Ministry of Agriculture and Food *Food Land Guidelines,* are compatible with agricultural production. The sale of Crown lands with Class 2, 3, or 4 capability for agricultural production will be permitted in the Blezard Valley, Alban-Noelville and Hagar-St. Charles areas only.
Bait Fishing	x		The existing level of activity will continue and additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing cottaging development will continue to be permitted. Cottaging on private land will be assessed, on a case-by-case basis, having regard for impact on Ministry programs. No Crown cottage development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to the operating and annual plans which contain specific guidelines for the protection of recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered.
Mining	x		Mineral exploration and development will continue to be permitted. Operating guidelines for the protection of fish and wildlife habitat and recreation values will be reflected in licences and work permits.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Road access will be managed to maintain low density public use. The Access Roads and MMA's Policies will be enhanced to ensure the protection of recreation values and important fish and wildlife habitat.
Rural Residential	x		Existing rural residential development will continue to be permitted. Within the areas covered by the *Minister's Zoning Order* in the Territorial District of Sudbury, the *Strategy for the Corporation of the Townships of Cosby, Mason and Martland,* and the *Official Plan for the Regional Municipality of Sudbury* and its associated secondary plans, as amended, this Ministry will continue to support the policies of the Ontario Ministry of Municipal Affairs and Housing and the organized municipalities concerning further residential development.
Sport Fishing	x		Angling will continue to be permitted according to regulation. In response to heavy sport fishing pressure within proximity to built-up areas, the Ministry of Natural Resources will concentrate its efforts on intensive fisheries management in Tank, Trout, and Hanmer 46 Lakes and the Vermilion River.
Tourism	x		Existing tourism establishments will continue to be permitted. New commercial lodge development, including both new proposals and expansions of existing operations, will be assessed, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts to increase harvests to the existing quota levels will also continue.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to monitor the small moose population in Rayside Township, in the interests of protecting the population and promoting habitat enhancement.

16. AGGREGATE DEPOSITS

a. Area Description

Glaciofluvial outwash deposits, glaciofluvial delta deposits, ice-contact kame moraines and eskers, and glaciolocustine beach deposits were deposited during the Pleistocene Period of continental glaciation.

Glaciofluvial outwash deposits, formed by deposition of water carried materials along glaciofluvial spillways and at the terminus of spillways, are concentrated in the Cartier-Levack area (Venturi, Hart, Moncrieff, Hess, Harty and Cascaden Townships). They are generally located in a north-south direction and follow the major river systems such as the Vermilion River. They generally contain well stratified sand and gravel materials.

Glaciofluvial deltas occur where glaciofluvial outwash was deposited into glacial Lake Algonquin. Major deltas occurred at the end of the Onaping Spillway (Dowling Township), Nelson Spillway (Lumsden Township), Vermilion Spillway (Hanmer and Capreol Townships) and Wanapitei Spillway (Aylmer and MacLennan Townships). These deltas cover an extensive area and contain large amounts of well stratified sands and gravels.

Ice contact deposits occur as kame moraines (water carried deposits) and eskers (long ridges formed by rivers flowing beneath the glacial ice). The major kame deposits formed in the District are located in Trill and Hanmer Townships. Along with sand and gravel, the kames also contain varying amounts of silt, clay and till. Eskers are relatively abundant in the north-central and western portions of the District, but are small and discontinuous. Two relatively larger eskers are located in Dowling and Cascaden Townships and in MacLennan, Falconbridge and Garson Townships.

Glaciolocustrine raised beach deposits occur as small, discontinuous sand and gravel deposits within the area that was once inundated by glacial Lake Algonquin. These deposits commonly occur up against the southern exposure of bedrock knobs at elevations between 250 - 300 metres above sea level. Pockets of coarse gravel, silt, clay and till also occur along with the sand and gravel. These deposits occur in the southern half of the District, primarily in Eden, Dill, Secord, Laura, Halifax, Attlee, Sale, Carlyle, Rutherford, Waldie, Cosby, Hoskin and Cherriman Townships. Two isolated deposits in Dryden, Street, Scadding and Loughrin Townships are also glaciolocustrine deposits.

These areas are considered essential to accommodate the demand for mineral aggregates through to the year 2000. Those deposits not included under area 16 are included under area 1 and area 15 in the Hagar-St. Charles area. They were not considered essential for target achievement and will accommodate local wayside pit requirements instead.

Reference should be made to Ontario Ministry of Natural Resources *Sudbury District Aggregate Potential and Operations Map* (as amended), for a more detailed description of the boundaries of each mineral aggregate deposit.

b. Land Use Intent

All new commercial aggregate operations will be promoted in these areas. Other uses which will not preclude aggregate extraction will be permitted. No Crown land disposition will be permitted with the exception of uses compatible with, or directly related to, aggregate extraction (e.g. crusher plant site). Once a deposit has been exhausted and the site rehabilitated, disposition may occur subject to an amendment specifying the approved sequential use for the area.

The Sudbury Airport is situated on the large aggregate deposit located just southwest of Boland's Bay, Lake Wanapitei. Any development near the airport must comply with Ministry of Transportation and Communications airport requirements. At the time of any Crown land disposition or the issuance of any work permits or licences in this area, these requirements and the following publications will be consulted and relevant conditions applied:

- Ontario Ministry of Housing, *Land Use Policy Near Airports;* and,
- Ontario Ministry of Municipal Affairs and Housing (Draft), *Height Restrictions Adjacent to Airports.*

The development of those deposits situated within the North Georgian Bay Recreational Reserve will occur with regard for the land use intent of the adjacent land use policy areas in areas 7 and 8. For those deposits in proximity to Killarney Provincial Park, site planning will ensure that the recreational values associated with the park are not jeopardized.

c. Land Use Activity for Area No. 16—AGGREGATE DEPOSITS

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		All new commercial operations will be promoted in these areas. For those areas within a recognized municipal planning area, the Ministry will continue to negotiate with each municipal organization to ensure that these areas, particularly private holdings, are given priority for pit and quarry operations and related or dependent industrial uses, wherever possible.
Agriculture	x		Agricultural production is an acceptable use. If aggregate shortages occur in agricultural areas, aggregate removal will receive the first priority, following extraction and rehabilitation.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing cottage development will continue to be permitted. Cottage development on private land may be permitted, on a case-by-case basis, having regard for impact on Ministry programs. No Crown cottage development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting operations are an acceptable use. In situations where the extraction of mineral aggregates could be delayed for the full rotation period, reforestation will be permitted, however, the planting of trees will normally be delayed until such time as the deposits have been exhausted and the sites rehabilitated.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around extraction operations for logging and/or aggregate).
Mining	x		Mineral exploration and development will continue to be permitted. Operating guidelines for the protection of fish and wildlife resources and recreation and tourism values will be reflected in licences and work permits. The Ministry will continue to co-operate with the Regional

Activity	Acceptable		Guidelines
	Yes	No	
			Municipality of Sudbury to ensure that those lands identified as the Nickel Irruptive, and high and medium potential lands within these areas, are given priority for mining and mining-related activities.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Roads associated with the extraction of mineral aggregates and related industrial uses will be permitted and managed to ensure that these deposits are not sterilized. Any proposed major highways will not be permitted; rather, the alternate route with the least impact on aggregate supplies will be supported.
Rural Residential	x		Existing rural residential development will continue to be permitted. The Ministry will continue to negotiate with the local municipalities to ensure that proposed rural residential development is deferred until aggregate resources have been depleted and properly rehabilitated.
Sport Fishing	x		Angling will continue to be permitted according to regulation.
Tourism	x		Existing tourism establishments will continue to be permitted. Proposed commercial operations will be reviewed, on a case-by-case basis, pending the full realization of the aggregate resource potential in each area.
Trapping	x		Trapping will continue to be permitted. Efforts will continue to increase harvests to existing quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue, with an emphasis on aerial moose surveys in the interests of habitat enhancement and population increase, particularly in the Levack Township area.

17. MOOSE MOUNTAIN/WORTHINGTON/ CONISTON

a. Area Description

This area is dominated by mineral exploration and development. Timber harvesting and aggregate extraction are secondary uses. Bait fishing, trapping, sport fishing and hunting are also prevalent. Virtually all of the area is held under private ownership.

Hutton Township is managed under a Crown Timber Licence to E.B. Eddy Forest Products Limited. This area will be managed according to the Forest Management Agreement signed in 1980 between the Ministry of Natural Resources and the Company, until 1999. The remainder of the area is within the Wanapitei Crown Management Unit. Numerous areas have been licensed under the *Crown Timber Act* to several local timber operators to supply local mills.

The major road, rail and air transportation networks and facilities which radiate out of the City of Sudbury pass through this area. Urban- and mining-related land uses dominate human settlement and industrial patterns, while commercial recreation activities have been characterized by accommodation and supply services since the 1960's.

The Ministry of Natural Resources worked closely with the Regional Municipality of Sudbury during the preparation of the *Official Plan* for the Region (approved in March, 1978 for a period of 20 years). At that time, the Ministry identified many of the natural resource concerns reflected in the policy section of this document. Since that time, refinements made to that resource data base have been reviewed in light of the natural resource management objectives of both this Ministry and the Regional Municipality of Sudbury. Major alterations to the *Official Plan* have not been required to date. The Ministry will continue to assist in the preparation of the subsequent secondary plans in this area.

Problems associated with resource development in the area have stemmed from undesirable resource management practices, as well as competition between recreationists and residential uses for the same land base required by mining, forestry and agricultural uses.

b. Land Use Intent

Mineral and aggregate extraction will be the primary uses. Timber harvesting and rural residential development are of secondary importance.

The Turbine deer wintering yard in Drury Township supports a population of approximately 100 deer. Any development which would reduce cover and browse will be prohibited on Crown land and not supported on private land. No further Crown land disposition will be permitted within the deer yard. Also, special guidelines for any development and resource management activities in proximity to the heronry in Norman Township will be prepared to ensure its protection. Throughout the remainder of the area, Crown land disposition will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy.

c. Land Use Activity for Area No. 17—MOOSE MOUNTAIN/WORTHINGTON/CONISTON

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial operations will continue to be permitted. No new commercial operations will be permitted, however, the Ministry will continue to co-operate with the Regional Municipality of Sudbury to ensure that areas identified as the Industrial Mineral Extraction area in the *Regional Official Plan* are given consideration for aggregate extraction and related or dependent industrial uses. Local wayside aggregate deposits may be developed, but will be limited to the extraction of material required in the regular construction of timber access roads and other similar uses.
Agriculture		x	For those private lands with Canada Land

Activity	Acceptable		Guidelines
	Yes	No	
			Inventory Class 2, 3, and 4 capability for agricultural production, referred to in the *Regional Official Plan* as part of the Agricultural Reserve, the Ministry will encourage any proposed uses which are compatible with agricultural production.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing seasonal residential development will continue to be permitted. Cottage development on private land will be considered, on a case-by-case basis, having regard for impact on Ministry programs. No Crown cottaging development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to the operating and annual plans which contain specific guidelines for the protection of recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development activity will continue to be permitted. Operating guidelines for the protection of recreation and tourism values and fish and wildlife habitat will be reflected in licences and work permits. The Ministry will continue to co-operate with the Regional Municipality of Sudbury to ensure that those lands with a high and medium mineral potential are given priority for mining and mining-related activities. Other uses, such as forestry, recreation, wildlife management, etc. which do not preclude future extraction, may be permitted.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Normal existing public access and recreational use will continue. Once timber extraction and regeneration activities have been completed in each cutting area, all secondary and tertiary timber roads will be closed to permit fish and wildlife populations, particularly moose, to increase.

Activity	Acceptable Yes	Acceptable No	Guidelines
			Watercrossings over the Vermilion River will be kept to a minimum and temporary in nature, wherever possible.
Rural Residential	x		The Ministry will continue to recognize the *Official Plan for the Regional Municipality of Sudbury* and its associated secondary plans, as amended. New residential development on those lands referred to as the Industrial Mineral Extraction area and Agricultural Reserve in the *Official Plan* will not be supported. Also, requests for the amendment of seasonal residential zoning to permanent residential zoning will not be supported. Similarly, the Ministry will continue to co-operate with the Ministry of Municipal Affairs and Housing concerning further residential development in the area covered by the *Minister's Zoning Order* in the Territorial District of Sudbury.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation. In response to heavy sport fishing pressure near built-up areas, the Ministry will continue to concentrate its efforts on intensive fisheries management, wherever feasible. Of primary concern are those lake trout lakes within the sphere of influence of fume damage, notably Ironside, Hutton, Kumska, and Rand Lakes.
Tourism	x		Existing tourism establishments will continue to be permitted. Additional commercial development, including both new proposals and the expansion of existing operations, will be considered, on a case-by-case basis, having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice harvesting		x	
Wildlife Viewing	x		Existing activities will continue to be permitted. Wildlife management efforts will continue to monitor the small moose population in Creighton Township in the interests of protecting the population and promoting habitat enhancement.

18. SUDBURY NICKEL IRRUPTIVE

a. Area Description

This is an oval shaped intrusion of Post Huronian, mafic intrusive rocks into an area of predominately sedimentary rocks. It is referred to as the Sudbury Nickel Irruptive portion of the Nipissing Diabase. The metallic and industrial mineral potential of this area is exceptionally high. Here, it should be explained that mineral potential is understood to mean mineral exploration potential and, although production potential is a relative parameter, the exploration activity must occur before production. Reference should also be made to Ontario Department of Mines (1968), *Geological Map 2170—Sudbury District* for a detailed description of the boundaries of the Nickel Irruptive.

This area has vast reserves of copper, nickel and platinum group metals. Altogether, there are an estimated 15 mineral products and by-products originating from this area. In the *Official Plan for the Regional Municipality of Sudbury,* this area is referred to as the Mineral Reserve.

Throughout the area, numerous stands of timber have been committed under Crown timber licences to several local operators to supply local mills. Also, several aggregate deposits, identified as being critical for meeting mineral aggregate commitments to the year 2000, are situated within this area. Windy and Fairbank Lakes have a moderate to high capability for intensive recreation activities and Fairbank Lake has been classified as an A_2 type lake trout lake. Cameron Creek is an important brook trout fishery and one of the few deer yards in the District is situated in Drury and Hyman Townships.

Problems associated with resource development in this area have stemmed from undesirable resource management practices and competition between recreationists, and forest and mining industry demands for the same resources, particularly in lakeshore areas.

b. Land Use Intent

Mineral exploration and development will continue to dominate land uses. Other uses which will not preclude the possibility of future extraction will be permitted. Crown land disposition will be considered, on a case-by-case basis, subject to the limitations posed for the availability of this non-renewable resource.

In the vicinity of Windy and Fairbank Lakes, an emphasis will be placed on the available recreational opportunities. Renewable and non-renewable resource extraction and related activities will be managed with regard for the recreational values in the area.

c. Land Use Activity for Area No. 18—SUDBURY NICKEL IRRUPTIVE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial quarry operations will be permitted to continue. New commercial aggregate operations are not proposed. Local wayside aggregate deposits may, however, be developed for the extraction of material required in the construction of timber access roads and other similar uses.
Agriculture		x	The capability for agricultural production is currently considered to be too low to warrant the development of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing cottage development will continue to be

Activity	Acceptable Yes	 No	Guidelines
			permitted. Additional cottage development on private land will be considered, on a case-by-case basis, having regard for impact on Ministry programs. No Crown cottaging development is proposed.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to the operating and annual plans which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		The Ministry will continue to co-operate with the Regional Municipality of Sudbury to ensure that those lands identified as the Nickel Irruptive, and high and medium mineral potential lands are given priority for mining and mining-related activities.
Provincial Parks		x	No provincial parks are propoeed.
Roads	x		Wherever additional roads are required, the guidelines under the Access Roads and MMA's Policies will be applied to ensure the protection of recreation values and fish and wildlife habitat.
Rural Residential	x		Existing rural residential development will continue to be permitted. The Ministry will continue to support the *Official Plan for the Regional Municipality of Sudbury* and associated secondary plans, as amended.
Sport Fishing	x		Existing activities will continue to be permitted. The Ministry has identified the need for more intensive fisheries management in those lake trout lakes within the sphere of influence of fume damage, to react to the impact of acid rain on these fragile fisheries populations and habitat. These lakes are Windy, Fairbank, and Morgan.
Tourism	x		Existing tourism establishments will continue to be permitted. Additional commercial development, including both new proposals and expansions of existing operations, will be considered, on a case-by-case basis, having regard for impact on Ministry programs.

Activity	Acceptable		Guidelines
	Yes	No	
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase the harvests to quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

19. AGNEW LAKE

a. Area Description

This area only includes that portion of Agnew Lake in Hyman Township within the Sudbury District. Existing uses in the area include hunting, fishing, boating, cottaging and hydro-electric power production. INCO Limited operates the Big Eddy and High Falls generation stations north of Turbine. These plants provide supplementary hydro-electric power to meet industry needs and to augment local hydro-electric power supplies when surplusses are available. As a consequence, the potential for resource management problems and land use conflicts is fairly high. For example, road location, construction and maintenance responsibilities are often split between municipalities, private property owners, private contractors and the Crown. These recreation and hydro-electric power production activities continue to dominate land uses.

b. Land Use Intent

The need to provide sufficient water resources for energy production at the existing dam sites will continue to be a Ministry management objective. To foster successful management, the Ministry will implement the integrated management guidelines for access roads and MMA's and will bring concerned parties together in an attempt to resolve site specific conflicts.

Crown land disposition will be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy.

c. Land Use Activity for Area No. 19—AGNEW LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing commercial quarry operations will continue to be permitted. No new commercial aggregate operations will be permitted. Local wayside aggregate deposits will only be permitted in association with uses such as the construction and maintenance of forest and mining access roads.
Agriculture		x	The capability for agricultural production is currently considered to be too low to warrant development of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	
Cottaging		x	Existing cottage development will continue to be permitted. Additional cottage development on private land will be considered, on a case-by-case basis, having regard for impact on Ministry programs. No Crown cottage development is proposed.
Crown Land Recreation	x		This use will continue to be an important use of Agnew Lake.
Forestry	x		Commercial timber harvesting operations will continue to be permitted according to operating and annual plans which contain guidelines for the protection of tourism and recreation values and fish and wildlife habitat.

Activity	Acceptable		Guidelines
	Yes	No	
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered.
Mining	x		Operational guidelines for the protection of other values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Wherever additional roads are required, the guidelines under the Access Roads and MMA's Policies will be applied to ensure the protection of recreation values and fish and wildlife habitat.
Rural Residential		x	Rural residential development will not be permitted on Crown land and the Ministry will not support rural residential development on private land.
Sport Fishing	x		Angling activities will continue to be permitted according to regulation.
Tourism	x		New tourist developments will be considered, on a case-by-case basis, on both Crown and private land adjacent to all waterbodies having regard for impact on Ministry programs.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

20. SPANISH RIVER

a. Area Description

This area includes a 120 metre wide strip of land along both banks of the Spanish River as it passes through the Sudbury District from the northern boundary of LaFleche Township through Athlone, Morse, Stralak, Moncrieff and Hart Townships.

Historically, the River was used for transportation by native peoples, trappers and the logging industry. In recent years, the River has been developed at different sites for hydro-electric power production. Lately, recreation (canoeing) has become the dominant use of the undeveloped reaches of the River, while wood production still remains an important use in the river valley.

Opinions concerning the ultimate primary use of the undeveloped sections of the River reflect divided support for both the formal recognition of recreational and hydro-electric power generation capabilities.

b. Land Use Intent

Until the appropriate end use of this resource area has been decided, Ministry programs will ensure that the potential of the River for both hydro-electric power production and outdoor recreation remain unjeopardized.

Programs designed to evaluate the potential of the Spanish River for additional hydro-electric power generation will be supported by this Ministry and the River will be referred to the Parks Council as a study area.

c. Land Use Activity for Area No. 20—SPANISH RIVER

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing	x		The existing level of activity will continue to be permitted.
Commercial Fishing		x	
Cottaging		x	The existing development will continue to be permitted. No Crown cottage development is proposed.
Crown Land Recreation	x		This area will continue to be recognized as an important canoe route. New facility construction will not be permitted.
Forestry	x		The 120 metre shoreline area along the length of the Spanish River will be treated as a MMA. Management practices will ensure that potential recreational use is not degraded.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered.
Mining	x		Mineral exploration will be permitted under controlled conditions as specified in work permits and licences.
Provincial Parks		x	Programs to further evaluate the potential of the area for recreational purposes will be undertaken and/or supported by this Ministry. The Spanish

Activity	Acceptable		Guidelines
	Yes	No	
			River will be referred to the Parks Council as a study area.
Roads		x	New bridge crossings and additional roads are not permitted.
Rural Residential		x	
Sport Fishing	x		Angling activities will continue to be permitted.
Tourism		x	Existing development will be permitted.
Trapping	x		Trapping will continue to be permitted. Efforts will be made to increase the harvests to achieve quota levels.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		

21. ONAPING LAKE

a. Area Description

The shoreline of Lake Onaping is primarily held under Crown ownership. Most lake development occurs at the southern end of the lake and is not extensive. Several lodges and over 200 privately-owned cottages have been built on the lakeshore.

All of this area is held under a Crown Timber Licence to E. B. Eddy Forest Products Limited. It is managed under a Forest Management Agreement, signed in 1980, between the Ministry of Natural Resources and the Company, until 1999.

Commercial fur harvesting and bait fishing also occur in this area. Fish and wildlife resources and the rugged terrain have attracted fishermen and hunters to this area. Lake Onaping is a B_2 type lake trout lake. The commercial tourist industry has focused on these resources. Fisheries resources and the moose population have been subjected to over-harvesting. Accessibility associated with timber harvesting has contributed to this problem. This accessibility is also regarded as being in conflict with the desire of some recreationists and tourist operators to prohibit access and maintain a natural environment recreational experience.

A declining sport fishery, erosion and dock damage, the latter caused by water fluctuations associated with the operation of control dams by E.B. Eddy Forest Products Limited, complaints about sewage dumping from boathouses, and inadequate access facilities are major concerns in this area.

b. Land Use Intent

Commercial timber harvesting and public and private recreation will continue to be the primary uses. Shoreland development including Crown land recreation activities and proposed cottage subdivision development will be designed to complement private interests. In the remainder of the area, resource extraction activities will have regard for recreation and tourism values and fish and wildlife habitat.

Crown land disposition may be considered, on a case-by-case basis, having regard for impact on Ministry programs and the general Crown Land Disposition Policy. Special conditions will apply in proximity to provincial park areas as follows:

- management activities primarily associated with resource extraction for mining, logging, and recreational uses will ensure that:
    - inappropriate access and the degradation of park values inherent to Halfway Lake Provincial Park are prevented by developing the most appropriate road network and closely monitoring water access in waters bordering these areas; and,
    - any disposition of Crown land in Antrim and Ulster Townships in proximity to park area boundaries will only be permitted if there is no impact on park values.

c. Land Use Activities for Area No. 21—ONAPING LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Commercial quarry operations will not be permitted. Local wayside pits may be developed, but limited to the extraction of material required in the regular construction of timber access roads and other similar uses.
Agriculture		x	The capability for agricultural production is currently considered to be too low to warrant the establishment of viable farm operations.
Bait Fishing	x		The existing level of activity will continue to be permitted. Additional operations will be considered, on a case-by-case basis, wherever supplies are available.
Commercial Fishing		x	

Activity	Acceptable		Guidelines
	Yes	No	
Cottaging	x		Existing seasonal residential development will continue to be permitted. Lakes identified within this area (table 1), with a potential for remote cottage development, will provide a portion of the cottage lots required to achieve the cottaging target. The Ministry will prepare a lake plan to assess the potential number of lots available for subdivision development on Lake Onaping.
Crown Land Recreation	x		The existing level of activity will be maintained pending the finalization of the Crown Land Recreation Policy.
Forestry	x		Commercial timber harvesting will continue to be permitted according to operating and annual plans, which contain specific guidelines for the protection of tourism and recreation values and fish and wildlife habitat.
Hunting	x		Hunting will continue to be permitted according to regulation, except in areas where life and property values may be endangered (e.g. around logging operations).
Mining	x		Mineral exploration and development will continue to be permitted. Operating guidelines for the protection of fish and wildlife habitat and tourism and recreation values will be reflected in licences and work permits.
Provincial Parks		x	No provincial parks are proposed.
Roads	x		Having regard for the land use intent, the most appropriate road system for both resource extraction and recreational uses will be developed in accordance with the proposed District roads strategy with respect to those areas in proximity to Halfway Lake Provincial Park. Pursuant to the terms and conditions of the Forest Management Agreement affecting this area, access roads will be open to the public and constructed to a standard to permit all-weather access. Normal existing public access and recreational uses will continue. Watercrossings over designated canoe routes will be kept to a minimum and, wherever possible, temporary in nature. Once timber extraction and regeneration activities have been completed in each cutting area, all secondary and tertiary timber roads will be closed to permit fish and wildlife populations, particularly moose, to increase. An exception may be made for those secondary access roads which would access Crown cottage subdivision development sites on Lake Onaping. Should Crown

Activity	Acceptable		Guidelines
	Yes	No	
			subdivision development be approved, these roads could remain open.
Rural Residential		x	
Sport Fishing	x		Angling will continue to be permitted according to regulation.
Tourism	x		Existing tourist establishments will continue to be permitted. The potential for commercial outpost camp development will be assessed on those lakes in this area identified in appendix C. Additional commercial lodge development on Lake Onaping, including both new proposals and expansions to existing operations, will be assessed, on a case-by-case basis, pending completion of the proposed lake management plan.
Trapping	x		Trapping will continue to be permitted. Efforts will continue to increase the harvests to achieve the assigned quotas.
Urban Development		x	
Wild Rice Harvesting		x	
Wildlife Viewing	x		Wildlife management efforts will continue to recognize the special habitat requirements of moose in this area and will focus on research and aerial moose surveys in the interests of habitat enhancement, population increase, and more wildlife viewing opportunities, particularly in Dunbar and Antrim Townships.

E: application

1. METHODS OF APPLICATION

The application of the *Sudbury District Land Use Guidelines* will be accomplished through the regular programs and activities of the Ministry such as:

- the planning and approval of specific Ministry development projects;
- the input to, and review of, municipal official plans, zoning by-law, plans of subdivision, consent applications, zoning orders under the *Planning Act*, and consent and variance applications by Committees of Adjustment;
- the review of specific development proposals by other proponents on both Crown and private land;
- the selective application of restricted area orders, under the *Public Lands Act* in areas without municipal organization;
- through specific conditions (e.g. access roads and modified management area guidelines) incorporated in permits, licences, leases, easements, etc., issued under the authority of various Provincial acts (e.g. the *Public Lands Act*, the *Mining Act*, the *Crown Timber Act*, etc.);
- liaison and co-operation with other Government ministries and agencies, such as the Ministries of Transportation and Communication, the Environment, Tourism and Recreation, Northern Affairs, Citizenship and Culture and Municipal Affairs and Housing, and the Nickel District Conservation Authority, etc.;
- education and extension programs with private landowners, municipalities, fish and wildlife and other interest groups; and,
- agreements, incentives and influence.

It is not intended that all targets be achieved immediately. The intent is to aim for that level of achievement over the next 20 years.

2. RESOURCE MANAGEMENT PLANS

Ministry land use guidelines essentially indicate where certain activities might be carried out on Crown land and under what general conditions. Resource management plans (e.g. forest management and operating plans) indicate how a specific activity will be carried out in a specified area and how other land uses will be considered.

All Ministry resource management plans must have due regard for the intent of the approved *Land Use Guidelines*.

3. MUNICIPAL PLANNING

The *Sudbury District Land Use Guidelines* have no legal status. The control of land use on private land within organized municipalities is exercised by the municipal councils or the Minister of Municipal Affairs and Housing under the authority of the *Planning Act*.

The Ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners in any effort to achieve effective and integrated resource management. The Ministry of Natural Resources will continue to work with these groups, especially with municipalities through the Ministry plan input and review program to ensure that natural resource values are considered in local planning documents. The *Sudbury District Land Use Guidelines* may serve as one of the sources of information for Ministry involvement in the municipal planning process.

Where this document indicates that the Ministry wishes to try to influence particular land uses on private land in organized municipalities in order to work towards the achievement of Ministry objectives, this will be undertaken in consultation with municipal officials and private landowners. At this time the needs of other users will be taken into consideration.

There will be occasions when the Ministry deems that certain land uses or proposed developments on private land, while in conformity with municipal planning documents, will have a negative impact on Ministry programs. In such situations, the

Ministry will attempt to resolve the situation through discussions with the proponent, the municipality and the Ministry of Municipal Affairs and Housing. If the Ministry is not satisfied with the results of the negotiations it may consider taking further action according to the procedures provided for under the *Planning Act* and in accordance with Ministry of Natural Resources policy.

In municipalities containing Crown land, there could be situations where municipal planning documents may or may not permit different land uses on Crown land than those that are indicated as acceptable on Crown land in this document. Where this happens, and it appears that a possible land use conflict might arise, the Ministry will consider taking further action under the procedures provided for by the *Planning Act*.

4. OTHER GOVERNMENT AGENCIES

In addition to providing internal direction for the integration of Ministry programs, this document will also highlight the various responsibilities of this Ministry for the public, other agencies and levels of government. It will also serve as one of the basis for Ministry input to the land use planning of others. The Ministry will work closely with other agencies and groups when carrying out its programs. In some instances, other agencies may assist the Ministry with the application of the *Land Use Guidelines*.

There may be occasions where the Ministry and others (e.g. another government agency) will have different intentions for the same area. When such situations are identified, the Ministry will enter into negotiations with the other agency to arrive at an acceptable solution.

5. APPLICATION OF RESTRICTED AREA OR ZONING ORDERS

a. Under the *Public Lands Act*

In areas without municipal organization, the Ministry of Natural Resources may apply a restricted area order under the *Public Lands Act* to control land use on private land when it is considered that a specific use would or might impact adversely on Ministry programs and would be contrary to the intent of the *Land Use Guidelines*.

b. Under the *Planning Act*

In areas without municipal organization the Minister of Municipal Affairs and Housing may apply a zoning order under the *Planning Act*. Such orders have a purpose and effect similar to zoning by-laws prepared by councils in organized municipalities.

In addition to the input to and review of these orders, the Ministry of Natural Resources might request the imposition of an order by the Ministry of Municipal Affairs and Housing or an amendment to an existing order.

NOTES

(1) As defined by the Canada Land Inventory, there are no Class 1 agricultural capability lands within the Sudbury District.

(2) The target, based on a projected maximum requirement to the year 2000, was developed in co-operation with the Ministry of Agriculture and Food using Dominion Bureau of Statistics data for improved farmland.

(3) These lands contain only Class 2, 3, and 4 agricultural lands that had previously been cleared (usually abandoned farmland).

(4) Northern Ontario means those parts of Ontario comprised of the Territorial Districts of Algoma, Cochrane, Kenora, Manitoulin, Parry Sound, Rainy River, Sudbury, Thunder Bay, Timiskaming, and those portions of the Territorial District of Nipissing, lying to the north or west of Algonquin Provincial Park (Regulation 936, under the **Tourism Act**).

(5) Non-residents have a wide variety of options from which to select a base of operations while recreating on Crown land. They include the following categories:

  (a) Provincial Park Campground—National Park Campground;
  (b) Commercial campground, hotel, motel, cabin;
  (c) Licensed tourist outfitting establishments including base and outpost camps;
  (d) Cottages owned by a non-resident;
  (e) Cottages owned by a friend or relative;
  (f) Crown land—designated access points and undeveloped and undesignated areas; and,
  (g) Crown land—under authorization of a land use permit.

(6) The pH, which is a logarithmic measure of hydrogen ion concentrations on a scale ranging from 1 to 14, is a means of gauging the acidity or alkalinity of a solution. On the pH scale, a chemically neutral solution has a value of 7. The greater the acidity, the lower the pH value, and conversely the greater the alkalinity, the higher the pH value.

(7) Water bodies within Indian Reserves are not included (i.e. 1,855 hectares).

(8) Reference should be made to Ontario Department of Mines (1968) **Geological Map 2170—Sudbury District**, for a detailed description of the boundaries of the Nickel Irruptive.

(9) Back-country travel refers to overnight travel through wilderness and non-wilderness provincial park areas by backpacking or canoe tripping enthusiasts.

(10) Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage appreciation, scientific study or education. They need not become 'Nature Reserves' under the **Provincial Parks Act**, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain or prevent any use of private land.

(11) The existing treaty and aboriginal rights as referenced in the **Canadian Constitution** will be further defined at future constitutional conferences.

(12) Population and harvest figures were derived from 1976 data.

(13) Population and harvest figures were derived from 1976 data.

APPENDICES

A: public consultation

1. INTRODUCTION

The Ministry of Natural Resources is committed to the involvement of the residents of the Sudbury District planning area in its land use planning program. The local population, seasonal residents and visitors to the District were afforded various opportunities to participate in all stages of the District land use planning process. This section provides a summary of the public responses during the District land use planning process, 1979 to 1983.

2. PHASE I— BACKGROUND INFORMATION

The Phase I—Background Information (1978-1979) segment culminated in the publication of the following documents:

- *Sudbury District Background Information Report (March, 1979)*—the *Background Information Report* contained data on and analysis of the natural resources relevant to the various land use activities and programs of the Ministry in the Sudbury District;
- *Sudbury District Land Use Planning Program Brochure (May, 1980)*—this brochure outlined the Ministry planning process, the need to plan, and to involve the public in the land use planning program; and,
- *Sudbury District Land Use Planning Program, Issue 1—Background Information Tabloid (July, 1980)*—information compiled in the *Background Information Report* was summarized in tabloid form.

Various methods were employed to inform the public of the land use planning process including a District News Release sent to everyone on the mailing list, public drop-in information sessions, newspaper, radio and television advertisements, and interest group meetings.

Participation in Phase I of the District planning process and the distribution of the *Background Information Report* occurred as follows:

a. Information Centre Participation

Location:	Sudbury— Civic Square	Sudbury— Shopping Centre
Date:	August 20-22, 1980	September 4-5, 1980
Attendance:	Not Recorded	Not Recorded

b. Distribution of Phase I—Background Information Documents

Documents	Information Centre	Mail	District Office	Libraries	Total
Background Information Report (March, 1979)	100	50	90	10	250
Brochure (May, 1980)	900	400	3,390	10	4,700
Tabloid (July, 1980)	850	3,800	300	10	4,960

c. Responses Received

Comments on the *Background Information* were received from a wide variety of people, businesses, interest groups, government and other agencies. Responses included comments recorded at drop-in centres held in the Civic Square and New Sudbury Mall, completed questionnaires, letters and briefs.

Sixteen letters, directly related to the *Background Information Report* were received from local Members of Provincial Parliament and local representatives for anglers and hunters associations/groups, forestry, mining and tourist industries, cottage associations, local municipalities and other government agencies. One letter was received from a trapper within the Northeastern Region.

Twenty responses to the questionnaire included with the Tabloid were received. One questionnaire was not signed. Eighteen responses were received from individuals in the District; one was received from the Tourist Industry in the District; and one was from an Environmental/Parks Association/Group in the Province.

Eight questionnaires were received on the *Northeastern Ontario Strategic Land Use Plan* applicable to the Sudbury District. One response was received from each of: an Anglers and Hunters Association/Group; the Forest Industry; and an Other—Cottage Association/Group, all from within the District. Four responses were received from individuals in the District residing outside of the Planning Region and one response was received from an individual residing outside of the Planning Region, in the Province.

A total of 71 groups, associations, organizations, industries and agencies were directly contacted and requested to participate in the District land use planning process. Comments were received from a total of 17 of these groups, and representatives attended a briefing session in the District Office on July 23, 1980.

d. Other Meetings With Specific Interest Groups
Three formal meetings were held to discuss the land use planning process in Sudbury. The first meeting was held with representatives from the forest, mining, tourist and trapping industries on July 23, 1980. On September 24, 1980, a presentation was made at the Civic Square to the Sudbury Regional Council members, and on May 15, 1981, at the Sudbury District Office, a meeting was held with local Members of Provincial Parliament.

The verbal and written responses were catalogued and summarized in a report entitled *Public Involvement, Phase I—Sudbury District Land Use Planning Program*, available for public inspection at the District Office, McFarlane Lake; at the Northeastern Regional Office, 199 Larch Street in Sudbury; and the Ministry of Natural Resources public reading room and the Legislative Library, both at Queen's Park in Toronto.
A mailing list was compiled to include everyone who expressed an interest in being involved in the District land use planning process.

3. PHASE II—PROPOSED POLICY AND PLANNING OPTIONS (1980-1982)

As a planning team, Ministry staff made decisions based on their professional judgement and attempted to estimate the nature of public reaction through their personal experiences as users of the resources in the Sudbury area. None of the training and experience of the planning team, could, however, replace informed and reasoned input from the citizens of the planning area. During the review period for the *Phase II—Proposed Policy and Planning Options*, all individuals, interest groups and government and other agencies on the District mailing list were again invited to comment. Newspaper, radio and television advertisements and items announcing the time and place of each Open House and the availability of the planning document were directed at the general public.

The focus of Ministry public consultation efforts continued to be at the local level. It is the local residents who usually have the most thorough knowledge of their area, and who will be most often directly affected by land use planning decisions. The Ministry continued to conduct its public consultation process in an informative manner. Open House meetings were provided in the Sudbury area in June, 1982, since they had already proven to be successful forums for constructive comment and creative criticism. Media coverage ensured that notice of the Open Houses was provided. Meetings with interest groups and organizations were also arranged upon request.

Participation in Phase II of the District planning process and the distribution of the *Proposed Policy and Planning Options* occurred as follows:

a. Open House Participation

Location:	Lively	Sudbury	Noelville	Onaping	TOTAL
Date:	June 10/82	June 11/82	June 15/82	June 18/82	
Attendance:	55	175	33	63	326

Of those who attended the Open House Sessions, 98.5 percent were local residents, 0.5 percent were from within the Planning Region; 1 percent were from southern Ontario. Eighty-eight percent of those in attendance were members of the general public, the remainder included Members of Provincial Legislature, representatives of environmental and fish and wildlife groups, the mining, forestry and tourism industries, other government agencies, local municipalities, the media and cottaging associations.

b. Distribution of Phase II—Proposed Policies and Planning Options Document

Open Houses	102
Mail	150
District Office	417
At Separate Meetings	6
As of Jan. 31/83	675

Eighty-five percent of the documents were distributed by mail or picked up by local residents, 5 percent were distributed within the Planning Region and the remaining 24 percent went to government agencies, environmental groups and residents of southern Ontario with a vested interest in the Sudbury District. Two documents were distributed to out-of-Province residents.

c. Responses Received

All forms of comment, from a brief telephone message to a formal brief, were welcomed. Everyone was asked to identify themselves and to bear in mind that all comments received on the *Proposed Policy and Planning Options* would be considered as part of the public record. Once the review period was completed (all comments received by December 31, 1982 were considered) the responses were catalogued and evaluated. Copies of all responses received are available at the District Office for anyone wishing to become more familiar with them.

Table A-1 summarizes the types of responses received by representative category and origin. In total, public input received amounted to 137 written and verbal submissions from 100 groups, agencies, businesses and individuals.

It was also realized that some residents in the Province might have interests in areas other than where they lived. Therefore, news releases describing schedules of public meetings throughout Ontario were issued by the Ministry. For those unable to attend Open House meetings in the Sudbury area, copies of the *Proposed Policy and Planning Options* were made available for public review and comment at the Ministry of Natural Resources library and public reading room in Toronto and at the Sudbury District Office.

Copies of all public input to the *Proposed Policy and Planning Options* have been compiled in public consultation binders available at the District Office, the Regional Office, as well as the Ministry of Natural Resources public reading room and the Legislative Library, both at Queen's Park in Toronto.

TABLE A-1 PUBLIC CONSULTATION—PHASE II (Input Received by Representative Category and Origin(1))

Representative Category	District	Region	Province	Other	Total
Members of the Provincial Legislature	0	0	0	0	0
Anglers and Hunters Associations/Groups	8	0	0	0	8
Commercial Fishing Industry	0	0	0	0	0
Environmental/Parks Associations/Groups	7	0	7	0	14
Forest Industry	3	3	0	0	6
Government Agencies (including Ontario Hydro and Conservation Authorities)	8	2	2	0	12
Individuals	49	2	8	0	59
Mining Industry	2	0	1	0	3
Municipalities (including Chambers of Commerce)	3	0	0	0	3
Native Organizations/ Groups	0	0	0	0	0
Tourist Industry	18	0	0	0	18
Trapping Industry	2	0	1	0	3
Other	10	0	1	0	11
Total	**110**	**7**	**20**	**0**	**137**
Percentage	**80**	**5**	**15**	**0**	**100**

(1) This table includes one reference to a petition received with 114 signatures attached. Also the data generated by letters directed to the Minister, with reference to the Sudbury District were not included. The table does not include all requests received for a copy of the Phase II document and does not include any information received after December 31, 1982.

B: prime lake trout lakes

This appendix summarizes the Ministry of Natural Resources rationale and basis for designating specific lake trout lakes in the *Sudbury District Land Use Guidelines.*

1. RATIONALE

Ontario has some 2,000 lake trout lakes. These represent the majority of the accessible lake trout lakes in the world. The Northeastern Administrative Region contains approximately 750 of these lakes. Their economic importance, attractiveness to sport fishermen and sensitivity to stress prompted the Northeastern Planning Region to develop an approach for the protection of the lake trout resources.

The potential impact of cottage subdivision developments on lake trout lakes, in terms of possible environmental degradation and increases in fishing pressure, was the first problem identified. Concerns related to the impact of improved access (roads and snowmobiles) on the exploitation of these lakes were also expressed and the potential impact of acid precipitation is only beginning to be understood. For these reasons, regional policy was developed to classify lake trout lakes in order to place some rational order of priority on Ministry land management and fisheries management efforts.

The Ministry was concerned with providing a diversity of angling opportunities. One very important opportunity is the chance to fish lake trout, a species which has become synonymous with clean water and wilderness. It is this image and the diversity of opportunity that makes the Northeastern Region attractive to tourists. Development on a lake is inconsistent with this image.

2. CLASSIFICATION

Lake trout lakes have been categorized into A, B and C type lakes based on the quality of the fishery and the lake trout habitat in each lake. General considerations used in classifying the lakes are described as follows:

A Lakes:
- must have natural reproduction (may be supplemented by stocking);
- should have a large area of water under the 20 metre contour (lake trout summer habitat); and,
- should have excellent water quality throughout the water column all year.

B Lakes:
- may have some natural reproduction or may be entirely maintained by planting;
- may have less water volume available for summer lake trout habitat; and,
- may have poorer water quality at some times of the year (e.g. lower pH, some oxygen depletion in late summer, etc.).

C Lakes:
- these lakes have ceased to be managed primarily as lake trout lakes although some lake trout may still be present.

The A and B lake type categories were further subdivided into A_1, A_2 and B_1, B_2 based on land tenure. The A_2 and B_2 groups are less than 100 percent Crown land.

3. LAND USE APPROACH

All Class A and B lake trout lakes are designated in the *Sudbury District Land Use Guidelines* (table B-1).

A 120 metre modified management area will be applied to all of these designated lake trout lakes. Forest management activities may be permitted within the modified management area subject to concerns for erosion/sedimentation and the protection of lake trout habitat.

Type A_1, B_1:
- these lakes will be managed exclusively for lake trout. No additional access or development will be permitted.

Type A_2, B_2:

- these lakes will be managed for lake trout, but consideration will be given to other objectives, on a case-by-case basis. Development should be designed to have a minimal impact on the aquatic habitat (e.g. shoreline setback, etc.).

Type C lakes are not designated in this document and will be considered for other uses as required. They may, however, be identified for other purposes, such as commercial outpost camp lakes.

TABLE B-1 LAKE CLASSIFICATION FOR SUDBURY DISTRICT LAKE TROUT LAKES

Classification	Township	Lake
Designated Lake Trout Lakes		
A_1 Lakes	Antrim/Ulster	Halfway
	Athlone	Upper Green
	Aylmer	Sam Martin
	Clary/Demorest	Alma
	Corley/Ellis	McCullouch
	Dundee	Benner
	Ellis	Regan
	Ermatinger	Weequed
	Haentschel	Haentschel
	Killarney/Roosevelt/Stalin	Threenarrows
	LaFleche	Big Squaw
	Marconi	Little Laundrie
	McConnell	Laura
		Marion
	McLeod/Ellis	Stull
	Moncrieff	Abbot
		Marion
	Muldrew	Path
	Parkin/Fraleck	Parkin
	Rhodes/Dunbar	Friday
	Roosevelt/Curtin	Helen (Hele)
	Roosevelt	Low
	Scotia/Dunbar	Scotia
	Seagram/Clary	Yorston
	Selkirk	Maggie
		Selkirk
		Solace
	Selkirk/Dundee	Pilgrim
	Stobie/Telfer	Paradise (Alphretta)
	Stobie	Centre
	Stralak/Gilbert	Kennedy
	Turner	Bull
	Wisner	Kumska
A_2 Lakes	Cascaden/Dowling	Windy
	Dieppe/Caen/Bevin/Goschen	Penage (Panache)
	Dundee	Bluesucker
	Fairbank/Trill/Denison	Fairbank
	Hoskin	Trout
	Kelly/Davis/Scadding/Rathbun	Kukagami
	MacLennan/Rathbun/Scadding	Wanapitei
	Venturi	Fox (MacCauley)
B_1 Lakes	Athlone	Lower Green
	Antrim	Antrim
	Botha/Sweeny	Venetian
	Bowell	Roland
	Cascaden	Cascaden
	Demorest/McConnell	Twin
	Dieppe	Bassoon
	Dundee	Rodd
	Ermatinger/Totten	Whitefish
	Fairbairn	Sugarbush
	Fraleck	Beaver
	Goschen	Peter
	Hess/Cartier	Carhess
	Howey	Laundrie
	Hutton	Hutton
	Kelly	Chuggin
	Kitchener	Bigwood
		Osbourne
	LaFleche	Little Squaw
	Levack	Soul
	McConnell	Davis
	McConnell/Sheppard	McGown

continued...

TABLE B-1 (continued) LAKE CLASSIFICATION FOR SUDBURY DISTRICT LAKE TROUT LAKES

Classification	Township	Lake
	McLeod	Whitepine
	Morgan	Morgan
	Morgan/Levack	West Morgan
	Morse/LaFleche/Stralak	Pogamasing
	Morse	Telephone
	Muldrew	Elboga
		McDougall
	Seagram	Seagram
	Secord	Millard
	Sheppard/McCarthy	Loney (Mickey)
B_2 Lakes	Bowell	Nelson
	Capreol	Capreol (Ella)
	Emo/Fairbairn/Ulster/Munster	Onaping
	Ermatinger/Cascaden	Ministic
	Hess	Geneva
	Louise/Dieppe	Little Penage (Panache)
	Norman	Waddell
	Sale/Humboldt	Tyson
Non-Designated Lake Trout Lakes		
C_1 Lakes	Athlone/Battersby	Athlone
	Attlee	Broker
	Aylmer	Bonhomme
		Caswell
		Lawlor
	Beaumont	Helen
	Botha	Botha
	Bowell	Rand
	Broder/Eden/Waters	Long
	Carlyle	Ruth-Roy
	Carlyle/Goschen	Johnnie
	Clary/Seagram	Marcia
	Delamere	Upper Sturgeon
	Demorest/Stobie	Dougherty
	Dieppe	High
	Eden/Bevin/Tilton	Wavy
	Fraleck	Fraleck
	Fox	Foy
	Goschen	Bell
		Hideaway
	Goschen/Stalin	David
	Hess	Hess
	Howey	Bowland
	Kelly	Kelly #27
		Potvin
	Kelly/McCarthy	Maskinonge
	Killarney	Acid
		George
		Kakakise
		Killarney
		Lumsden #17
		Norway
		O.S.A.
	Leinster	Shingwak
	Levack	Moose
	Mackelcan	Franks
		Irish
		Sylvester
		Wolf
	McCarthy	Colin Scott
		Edna
		Kettyle
		Lower Matagamasi
	McCarthy/Kelly	Donald
	McConnell	Anilia
		Evelyn
		Marjorie
		McConnell Bay
		Rawson
	McConnell/Mackelcan	Dewdney
	McKim	Nepawhin
	McKim/Neelon	Ramsey
	Morse/Athlone	Bobwhite (3 Mile)
	Norman	Selwyn
	Parkin/Hutton	Dean
		Mowat
	Parker/Dundee	Florence
	Rathbun/Mackelcan	Matagamasi
	Rhodes	Richardson
	Roosevelt	Nellie

continued...

TABLE B-1 (continued) LAKE CLASSIFICATION FOR SUDBURY DISTRICT LAKE TROUT LAKES

Classification	Township	Lake
	Seagram	Linger
	Sheppard	Pedro
	Stalin	Great Mountain
		Little Mountain
	Stobie	Barron
		Stobie
	Stobie/Demorest	Frederick
	Telfer	Telfer
	Telfer/McConnell	Chiniguchi
	Tilton/Halifax	White Oak
	Trill/Totten	Armstrong
	Turner	Yorkshire River Pool
	Turner/Marconi	Stouffer
	Tyrone	Michaud
		Sandcherry

C: selection rationale for tourism lakes

Specific land requirements for additional tourism facilities will be evaluated, on a case-by-case basis. Outpost camp opportunities will be assessed through the lake cottage planning program (as described in the Cottaging Policy section) on those lakes listed in table C-1.

These lakes will be assessed for their potential to support commercial outpost camp development. They have been selected because:

- they presently support a commercial outpost camp and may have the potential to support further commercial development;
  or,
- they appear to meet the following criteria:
  - the lake has sufficient surface area to support fish production levels necessary to support the sport fishing harvest demands of a commercial operation;
  - the lake is relatively isolated with no road access;
  - the lake is relatively undeveloped; and,
  - the lake is not an A_1 or B_1 type lake trout lake; and/or,
- they have been identified by commercial operators as lakes that may be suitable for outpost camp use.

Until data required to determine whether a lake satisfies this criteria is compiled, development will be deferred.

TABLE C-1 PROPOSED LIST OF LAKES TO BE ASSESSED FOR OUTPOST CAMP DEVELOPMENT(4)

Township	Lake
Beaumont	Coonie
Beresford	MacSmith(1)
Demorest	Dougherty Pilgrim Creek(1)
Dunbar	Scotia(3)
Fairbairn	Onaping(1)
Kelly	Donald Maskinonge(2)
Moncrieff	Spanish
Muldrew	Upper Path(1)
Rhodes	Friday(3) Rhodes
Roberts	Morin
Sale	Annie
Stralak	Franklin(3) Kennedy(3)
Sweeny	Dua(1) Rome(1) Upper Dua
Telfer	Chiniguchi Telfer
Tilton	White Oak

(1) A lake with existing outpost camp development and where more development may be considered.

(2) A lake proposed for subdivision development. Pending the decision to develop subdivision lots, this lake may or may not have the potential to support outpost camp development.

(3) A lake with existing outpost camp development where no further development will be considered because it is either an A_1 or B_1 type lake trout lake.

(4) Once the potential for each lake has been assessed, the District will indicate whether the lake will be available for outpost camp development. If any lakes are not suitable for commercial development, they will be added to the list of lakes to be assessed for remote cottage lot development.

D: forest management agreements

The Ministry's forestry program is one of the major means of implementing the Government's commitment to strong economic development in Ontario. The forest management agreements (FMA) were developed to ensure a productive forest land base in perpetuity for the long-term health of the forest products industry. As with the parks systems planning, there is a relationship between these agreements and land use planning.

The Ministry undertook a review of the FMA process in 1981 which allowed it to make some technical adjustments. The review revealed that the processes used to deal with land use issues arising from FMA's are generally sound, and provide the opportunity to involve the public in the process.

Land use guidelines, once in place, will provide the base from which FMA's will be developed.

For those FMA's which were completed or being negotiated prior to the completion of these documents, district staff initiated development of a general land use map covering the FMA area.

This land use map showed those areas of existing licences where forestry operations will generally be permitted. They also indicated where, to ensure the continuing success of resource management programs, forestry operations may be restricted (e.g. moose habitat), and where they may be prohibited (e.g. shoreline reserves along canoe routes).

The map was developed from direction provided by the strategic land use plans, the information provided through the district land use planning process to date and Ministry staff general knowledge of the areas. It formed the basis of negotiation with the company for areas to be excluded from the FMA or subject to special management prescriptions.

The candidate FMA area maps and relevant background data were then made available for public review and comment. After public review and comment the Ministry and the company carried out any necessary revisions to the FMA area, if required.

GLOSSARY

Angler
A person taking or attempting to take fish by means of a hook and line or a hook, line and rod when s/he is tending it.

Back-Country Recreation
This includes canoe tripping and backpacking in remote areas, accessible only by foot or by manually-powered water craft.

Benefit
Anything for the good of a person or thing. Common measures of benefits are jobs, dollars earned and user-days of recreation.

Candidate Park
An area designated in Ministry of Natural Resources *Land Use Guidelines* which may be given official status as a park at some time in the future.

Capability
The natural ability of an area to provide continuous opportunity for benefits under an assumed level of management.

Capacity
The upper limit to which an area of land or water may be used or developed without an undesirable change taking place in the environment. Also called carrying capacity.

Compatibility and Conflict
Where two uses occur in the same general area at the same time they are said to be compatible uses. When uses cannot occur together, they are said to be in conflict. Examples of compatible uses are forestry and upland wildlife production. Uses in conflict are mining and wilderness preservation.

Commercial Fishing
The taking, for sale, of fish, other than game fish, by means of any hook, line, trolling line, spear, minnow trap, dip-net, gill-net, hoop-net, pound-net, seine-net, trammel-net, trap-net or trawl-net.

Critical Areas
All land areas required for target achievement. If the areas were removed or lost from production, a major decrease in output production would result. These areas also include areas and/or features essential for program achievement identified through the Sensitive Area Program.

Crown Land
All land (including land under water) held by the Province, both land which has never been sold and land which has been reacquired.

Crown Lease
A grant of leasehold rights on a parcel of Crown land for a specific purpose over a specified period of time which is generally longer than would be the case with a land use permit.

Environment
All the natural and man-made systems, conditions, and commodities of a planning area.

Forest Management Area
A contractual agreement between the Crown and a forest operations company which specifies how Crown forests within the licensed area will be managed to ensure the forests are harvested and regenerated to produce successive crops of timber on a sustained yield basis.

Goal
A general purpose to which the Ministry aspires.

Habitat
The place or type of site where an animal or plant naturally or normally lives.

Hazard Land
Land which, because of its physical characteristics in combination with its location, presents a risk for its occupants including loss of life, property damage and social disruption (e.g. flooding).

Integrated Resource Management
The co-ordination of resource management programs to ensure that conflicts are minimized and that management which would benefit several programs is encouraged. Integrated management

encourages multiple use, but recognizes that in some circumstances management of areas for a single purpose may be necessary.

Interim Use
Land and resource use and management practices which are permitted to occur over a period of time prior to the initiation of another identified use.

Land Use
The human use and management of land, water and related resources.

Land Use Guidelines
A document which displays direction concerning the use of land and water in a defined area. It identifies where and how the Ministry intends to achieve its objectives in a specific District through the use of Crown land and through influencing the use of private land.

Land Use Permit
A permit which grants the holder the right to use a parcel of Crown land for a specific purpose over a limited period of time.

Land Use Planning
A process which culminates in a direction regarding the use of land.

Management
The judicious use of means to achieve ends. Management may have various levels of intensity.

Mining Rights
The right to work the ores and minerals on or under any land. These may be granted separately from surface rights.

Morphoedaphic Index (MEI)
This is the ratio of the relationship between total dissolved solids and the mean water depth.

Multiple Use
A resource management or planning concept applied to very large areas to indicate that all basic uses are accommodated. Normally, two or more uses may occur on the same general area at the same time or in sequence.

Natural Environment Class Park
A natural environment park is an area incorporating outstanding recreation landscapes with representative natural features and historical resources providing high quality recreational and educational experiences.

Objective
A quantifiable end result to be achieved (e.g. to minimize property damage due to flooding).

Operational Plan
A part of a resource management plan stating the extent (includes human and financial resources) of all work of any nature to be carried out during one or more years of the management period.

Opportunity
A measure of recreation supply. It is used to describe the number of times a resource or facility can be used (occasions of use) in a given time period. An opportunity is considered not to be greater than one day.

Optimum Sustainable Yield
The concept refers to the maximum level of resource harvest which can be sustained on a long-term basis without causing detrimental effects on the resource base.

Patent Lands
Land transferred from Her Majesty the Queen in the Right of Ontario to an individual, company, or corporation, in perpetuity.

Park Master Planning
A process whereby candidate parks, through prescribed study and analysis, are classified and zoned in accordance with the Ontario Provincial Parks Policy and the Ontario Provincial Parks Planning and Management Policies.

Parks Systems Planning
A process whereby regional surveys and analyses are completed to identify proposed candidate parks in order to meet the protection, heritage appreciation, recreation, and tourism objectives of the Ontario Provincial Parks Policy. Results of parks systems planning provide the input from the parks program to land use planning.

Policy
A decision concerning the objectives to be achieved and the means of achieving them. For District land use planning purposes, emphasis is placed on objectives, targets and strategies.

Productive Forest Land
An area dedicated to the growing of merchantable timber or the production of other forest products.

Program
An activity undertaken by the Ministry to provide a service or manage a particular resource.

Protection Forest
An area wholly or partially covered with woody growth, managed primarily to regulate streamflow, prevent erosion, hold shifting sand or exert any other beneficial influence.

Public Land
Any land owned or administered by a public body or agency. It includes Federal, Provincial and municipally owned lands and lands held by agencies such as parks commissions and conservation authorities.

Recreation Class Park
A recreation park is an area which supports a wide variety of outdoor recreation opportunities for large numbers of people in attractive surroundings.

Regeneration
The renewal of a forest crop by natural or artificial means; also, the new crop obtained.

Resident
A resident of Ontario is generally a person who has actually resided in Ontario for a period of seven months of the year. A "local resident" is a resident of the Ministry of Natural Resources Administrative District planning area.

Resource Management
The control and co-ordination of the use of resources to achieve specific ends. Commonly applied in particular to natural resources.

Resource Management Plan
A plan by which the policies, objectives and targets usually of an individual program (except in the case of an integrated resource management plan) are implemented for a specific resource.

Sensitive Area
A place that contains features of value, the preservation of which is the primary management objective.

Sequential Use
Where one use is followed by another in planned sequence.

Site Class
A measure of the relative productive capacity of a site for a particular species or crop. The average height at a given stage of development is generally the basis for classification.

Sport Fish
For the purpose of this document, sport fish are the top predator species sought by anglers.

Strategy
Planned actions or measures to achieve a desired end.

Surface Rights
All rights in land, other than mining rights, including sand and gravel deposits.

Target
A quantifiable end to be achieved or completed by a specific date.

Tourism
When referenced in the Land Use Activity guidelines, tourism means the physical base of operations, namely structures, primarily associated with lodges, outpost camps, marinas, 4-season sporting facilities, etc. with a formalized access system.

Waterway Class Provincial Park
An area of outstanding recreational water routes with representative natural features and historical resources to provide high quality recreational and educational experiences.

Wetlands
Lands which are permanently or seasonally covered with shallow water and where distinctive soil conditions, plant and wildlife communities develop. These include wetland forests (swamps), wetland thickets, marshes, bogs and fens.

Wilderness Class Provincial Park
A wilderness area is a substantial area (i.e. approximately 50,000 hectares) where the forces of nature are permitted to function freely. Visitors travel by non-mechanized means to experience solitude, challenge and personal integration with nature.

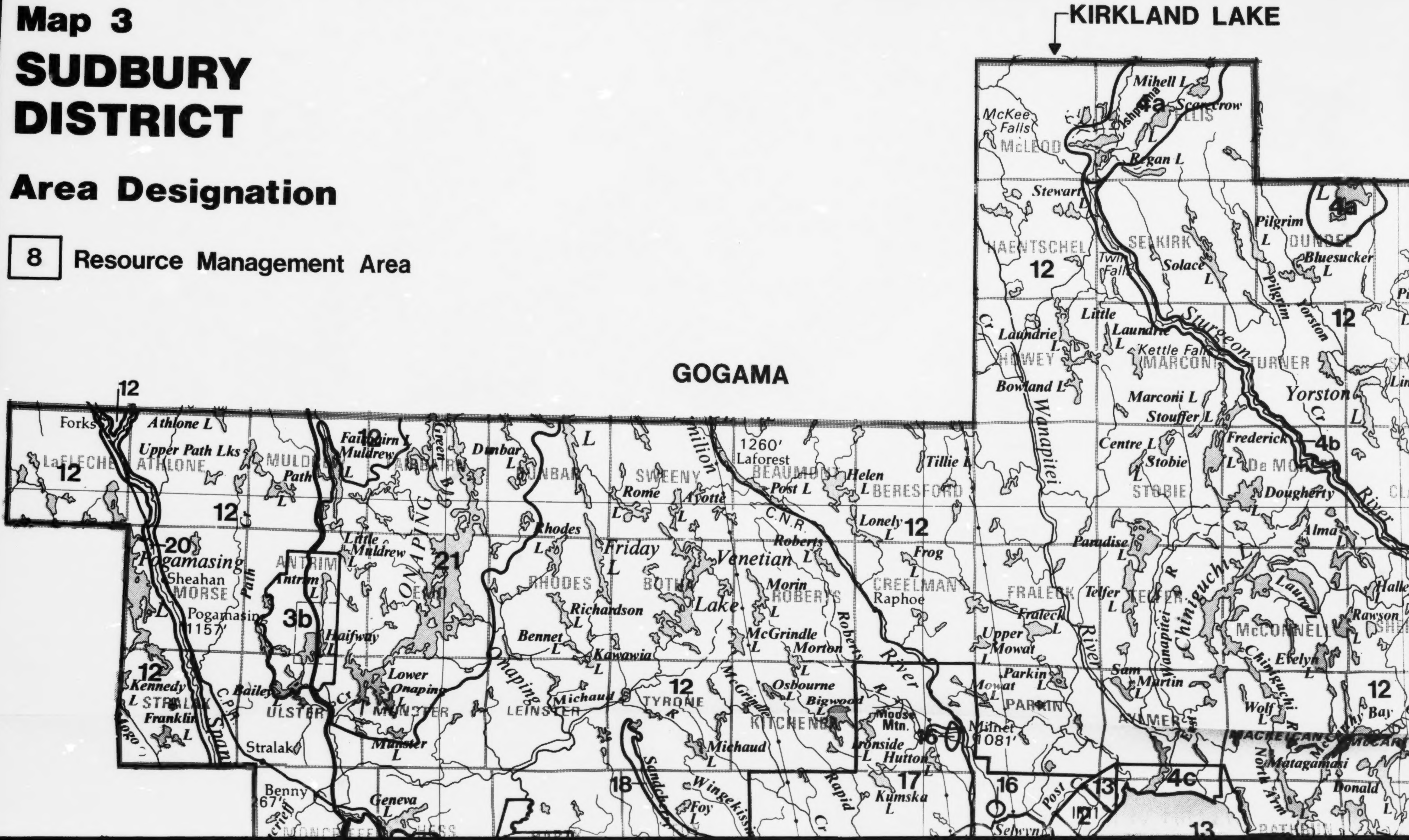
Work Plan
A plan prepared annually which defines what management activities are to be undertaken for that year.

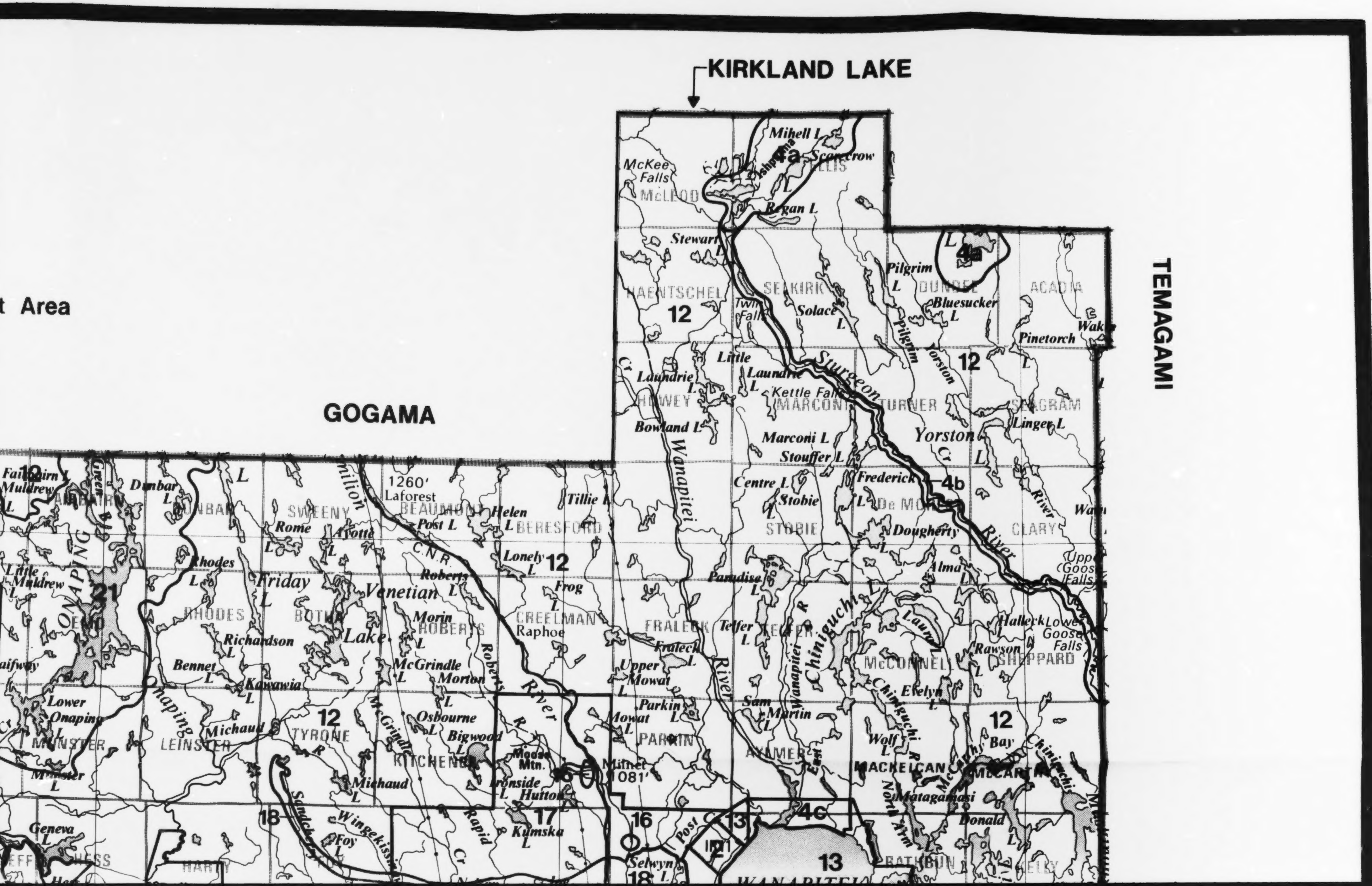
Working Group
Tree stands having the same predominant species and managed under the same rotation and broad silvicultural system.

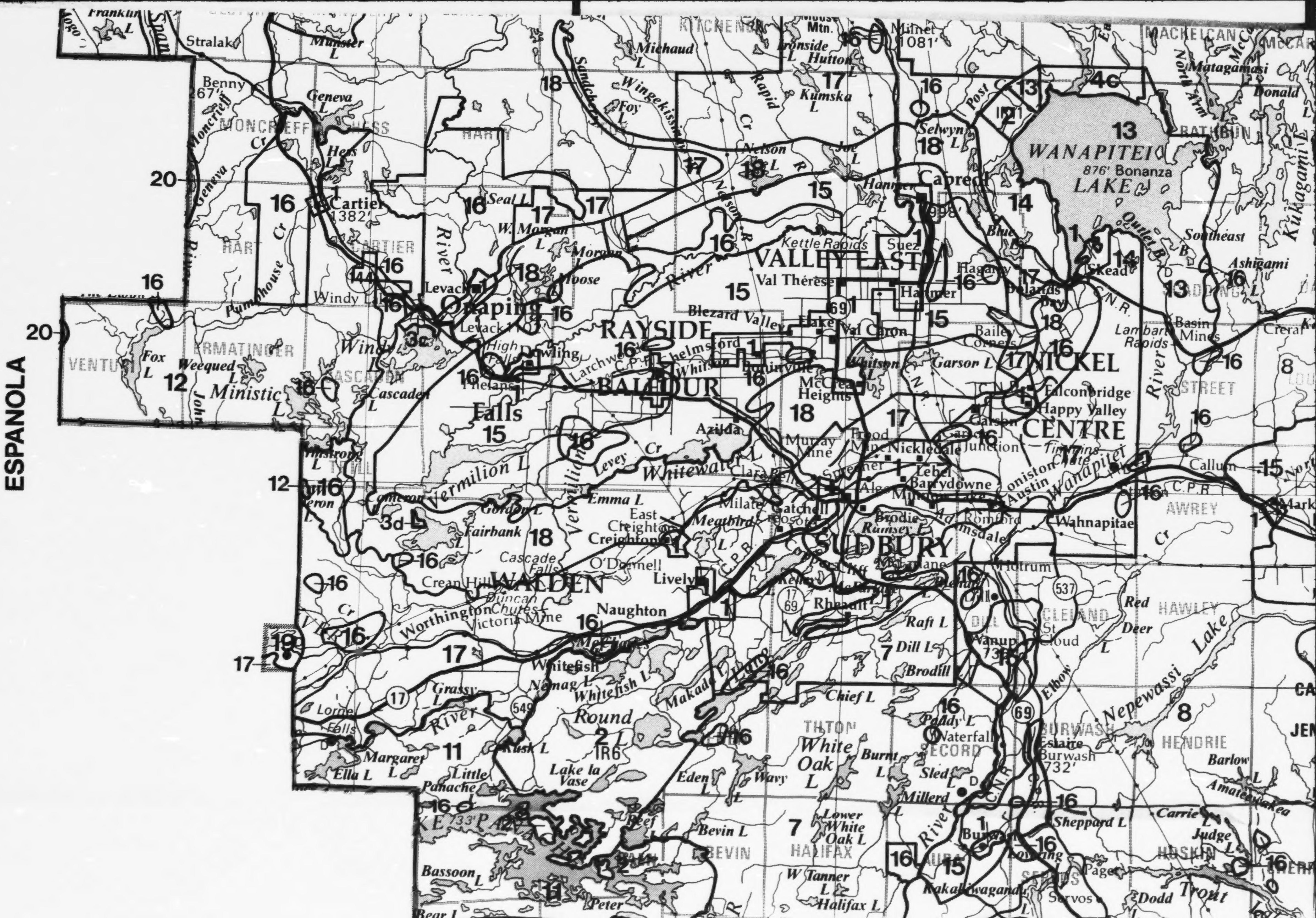
Map 3

SUDBURY DISTRICT

Area Designation




KIRKLAND LAKE
t Area
GOGAMA
TEMAGAMI
Mihell L
Ishpatina
4a
Scarecrow
ELLIS
McKee Falls
McLEOD
Regan L
Stewart L
4a
L
HAENTSCHEL
12
Twin Falls
SELKIRK
Solace L
Pilgrim L
DUNDEE
Bluesucker L
Pilgrim
ACADIA
Pinetorch
Wakimika
Little Laundrie L
Laundrie L
Cr
Sturgeon
Kettle Falls
HOWEY
MARCONI
TURNER
Yorston
12
SEAGRAM
Linger L
Bowland L
Marconi L
Yorston Cr
Wanapitei
Stouffer L
L
Centre L
Stobie L
Frederick
4b
De MORGAN
Wanapitei
Stobie
STOBIE
Dougherty
River
CLARY
River
Alma
Upper Goose Falls
Paradise L
Chiniguchi L
Laura
Halleck
Lower Goose Falls
FRALECK
Telfer L
TELFER
R
Wanapitei R
Rawson L
SHEPPARD
Fraleck L
River
McCONNELL
Upper Mowat L
Chiniguchi R
Evelyn L
Mowat L
Parkin L
Sam Martin L
12
PARKIN
Wolf L
Bay
Chiniguchi
AYLMER
East
MACKELCAN
McCARTHY
McCarthy
Matagamasi
North Arm
Donald L
16
Post
13
4c
21
13
WANAPITEI
RATHBUN
KELLY
Selwyn L
18
Milnet 1081′
16
Moose Mtn.
Ironside L
Hutton
17
Kumska L
Rapid
Cr
R
River
Roberts
KITCHENER
Bigwood L
Osbourne L
McGrindle
Morton L
McGrindle L
12
TYRONE
R
Michaud L
Wingekissing
Foy L
Sandcherry
18
Michaud L
Kawawia L
LEINSTER
Onaping
Bennet L
Richardson L
RHODES
Friday L
BOTHA
Venetian Lake
Morin L
ROBERTS
Roberts L
C.N.R.
CREELMAN
Raphoe
Frog L
Lonely L
12
Rhodes L
Rome L
Ayotte L
SWEENY
Vermilion
1260′ Laforest
BEAUMONT
Post L
Helen L
BERESFORD
Tillie L
DUNBAR
Dunbar L
L
Fairbairn L
Muldrew L
FAIRBAIRN
Green B
12
ONAPING
21
Little Muldrew L
EMO
Halfway
Lower Onaping
Cr
MUNSTER
Munster L
Genova L
HESS
HART
Hess


ESPANOLA
Franklin L
Stralak
Munster L
Michaud L
KITCHENER
Moose Mtn.
Ironside L
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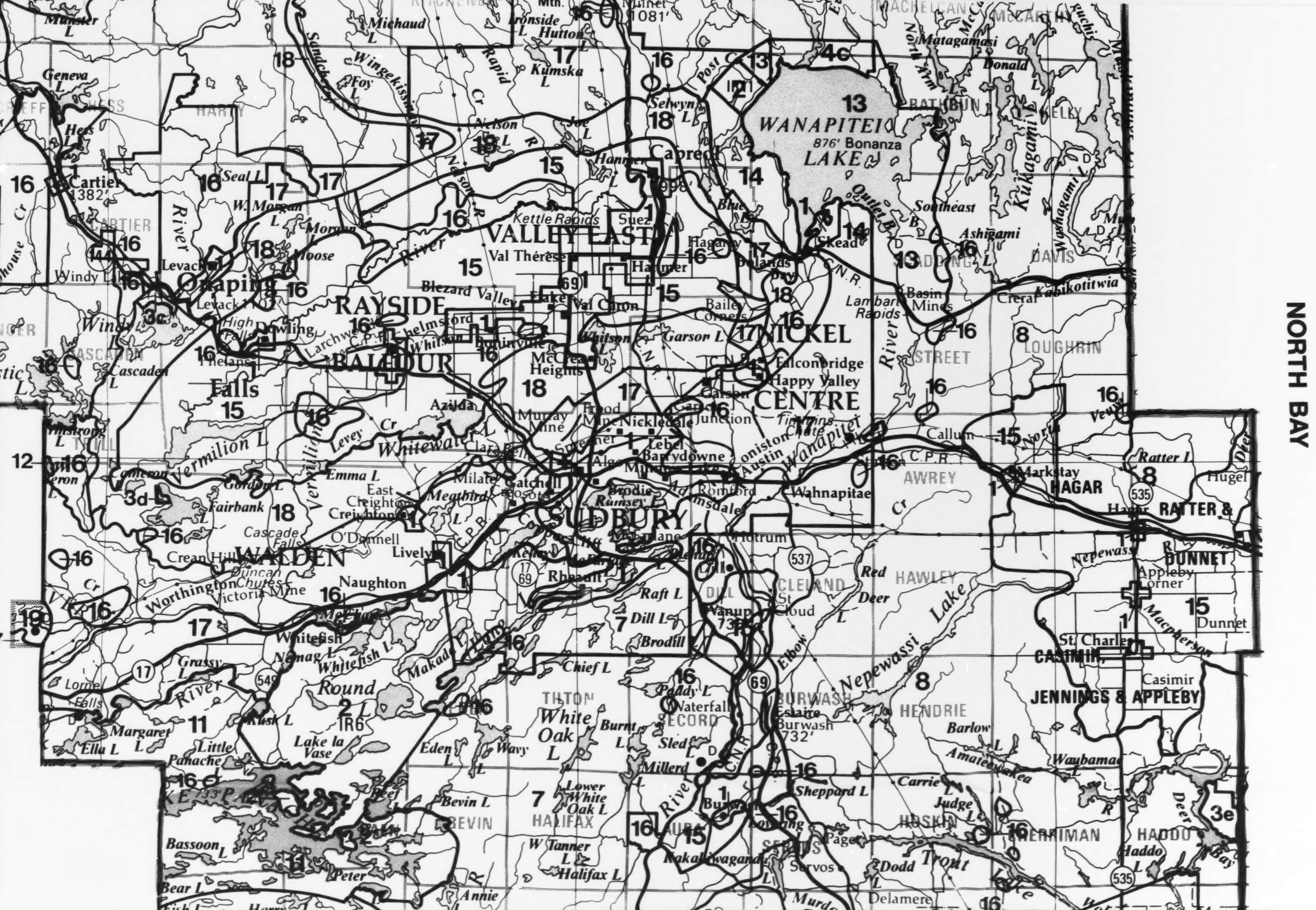
MACKELCAN
Matagamasi
Donald
Benny 1267'
Moncrieff
MONCRIEFF
Geneva L
HESS
Hess L
18
Sandcherry Cr
Wingekissing
Foy L
17
Kumska L
16
Post C
13
IR11
4c
13
WANAPITEI LAKE
876' Bonanza
BATHRUN
North Arm
Kukagami L
HARTY
Geneva
20
Cartier 1382'
16
16
Seal L
17
17
W. Morgan L
Morgan L
17
Nelson L
Nelson R
18
Joe L
15
Hanmer L
Capreol
998'
Selwyn L
18
14
Blue L
Southeast B
Ashigami
HART
Pumphouse Cr
CARTIER
River
16
Windy L
Levack
Onaping
Moose
18
16
River
Kettle Rapids
Suez
VALLEY EAST
Val Thérèse
15
Hanmer
Hagarty
17
Bowlands Bay
Skead
14
13
16
20
VENTURI
Fox L
Weequed L
ERMATINGER
Ministic L
12
John
CASCADEN
Cascaden L
18
3c
Windy L
Levack
High Falls
Dowling
16
RAYSIDE
Blezard Valley
Chelmsford
C.P.R.
Larchwood
Whitson
Blezard
Val Caron
Bailey Corners
15
18
NICKEL
16
Lambart Rapids
Basin Mines
Crerar
8
STREET
16
Phelans
Falls
15
BALFOUR
16
Azilda
McCrea Heights
Whitson L
Garson L
17
Falconbridge
Happy Valley
CENTRE
Garson
Garson Junction
18
17
16
Armstrong L
THOLL
16
12
Cameron L
Vermilion L
16
Levey Cr
Whitewater L
Murray Mine
Hood
Nickeldale
Lebel
Barrydowne
Timmins Chute
Coniston
Austin
Wanapitei
Callum
15
C.P.R.
AWREY
16
Stinson
Markstay
1
3d
Gordon L
Fairbank L
18
Cascade Falls
Emma L
Vermilion
Clarabelle
Milate
Meatbird L
Gatchell
Copper Cliff
East Creighton
Creighton
SUDBURY
Brodie
Ramsey L
Romford
Lansdale
Wahnapitae
16
O'Donnell
Lively
Crean Hill
WALDEN
Duncan Chutes
Victoria Mine
Worthington
Naughton
16
16
McFarlane
Rheault
Hotrum
537
DILL
CLELAND
St Cloud
Red Deer L
HAWLEY
Lake
Nepewassi
17
69
Raft L
Dill L
Brodill
Wanup 738'
7
16
19
17
17
Whitefish
Nemag L
Whitefish L
Makada L
16
16
Chief L
Elbow
69
549
Grassy L
17
Lorne Falls
River
Round 2 L
IR6
Paddy L
Waterfall
BURWASH
Estaire
Burwash 732'
8
HENDRIE
Barlow
JEN
Margaret L
Ella L
11
Kusk L
Eden L
Wavy
TILTON
White Oak L
Burnt L
RECORD
Sled L
C.N.R.
Amateewakea
Little Panache
Lake la Vase
16
Millerd
16
Sheppard L
Carrie L
Judge L
PANACHE 733'
IR2
Reef
Bevin L
BEVIN
7
Lower White Oak L
HALIFAX
16
15
Burwash
16
Bowlands Bay
Pages
HOSKIN
16
Bassoon L
11
Peter
W Tanner L
Halifax L
Kakakiwaganda L
SERVOS
Servos
Dodd
Trout
Bear L
C.N.R.


Munster L
Michaud L
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Geneva L
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Harty
Selwyn L
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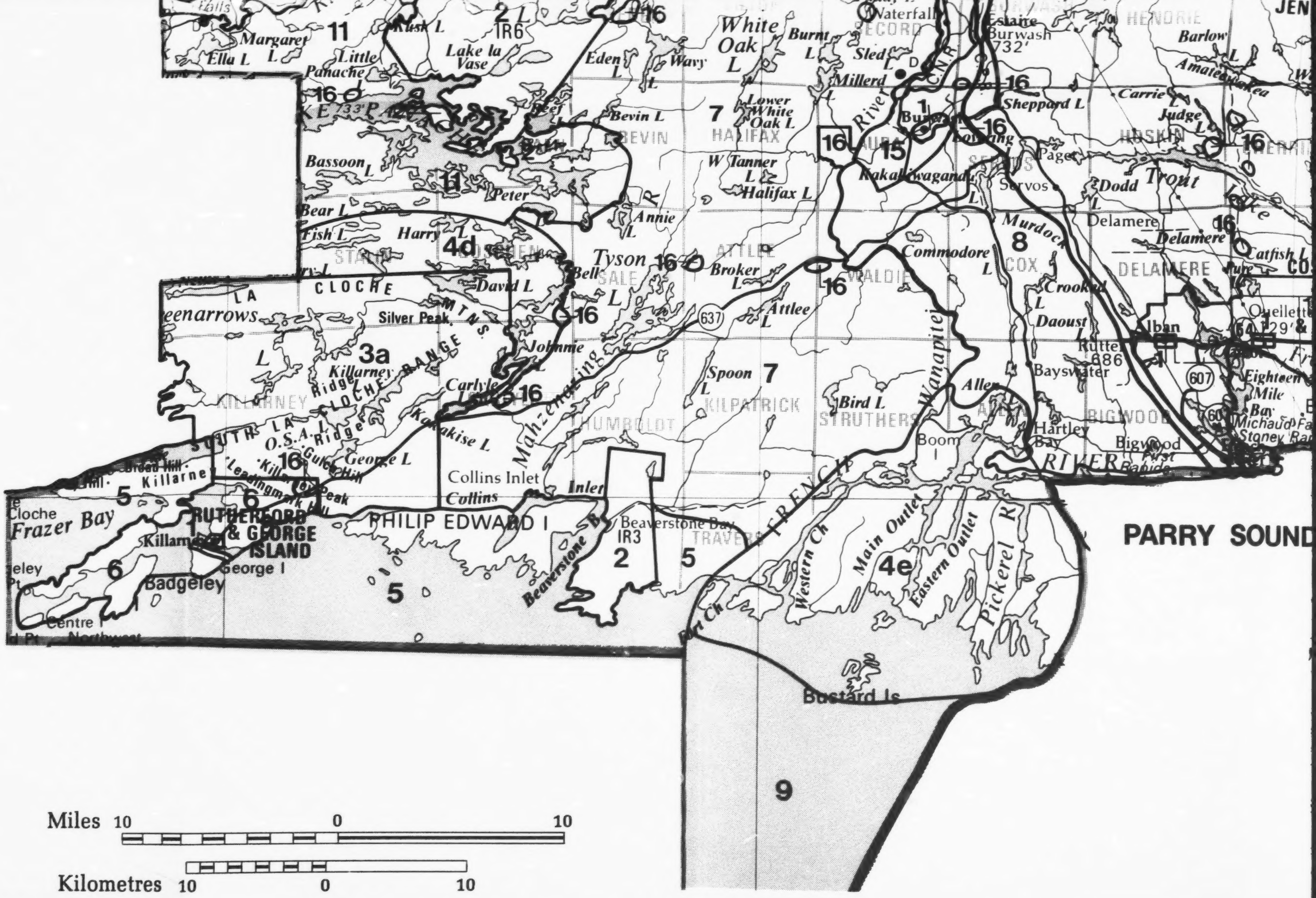
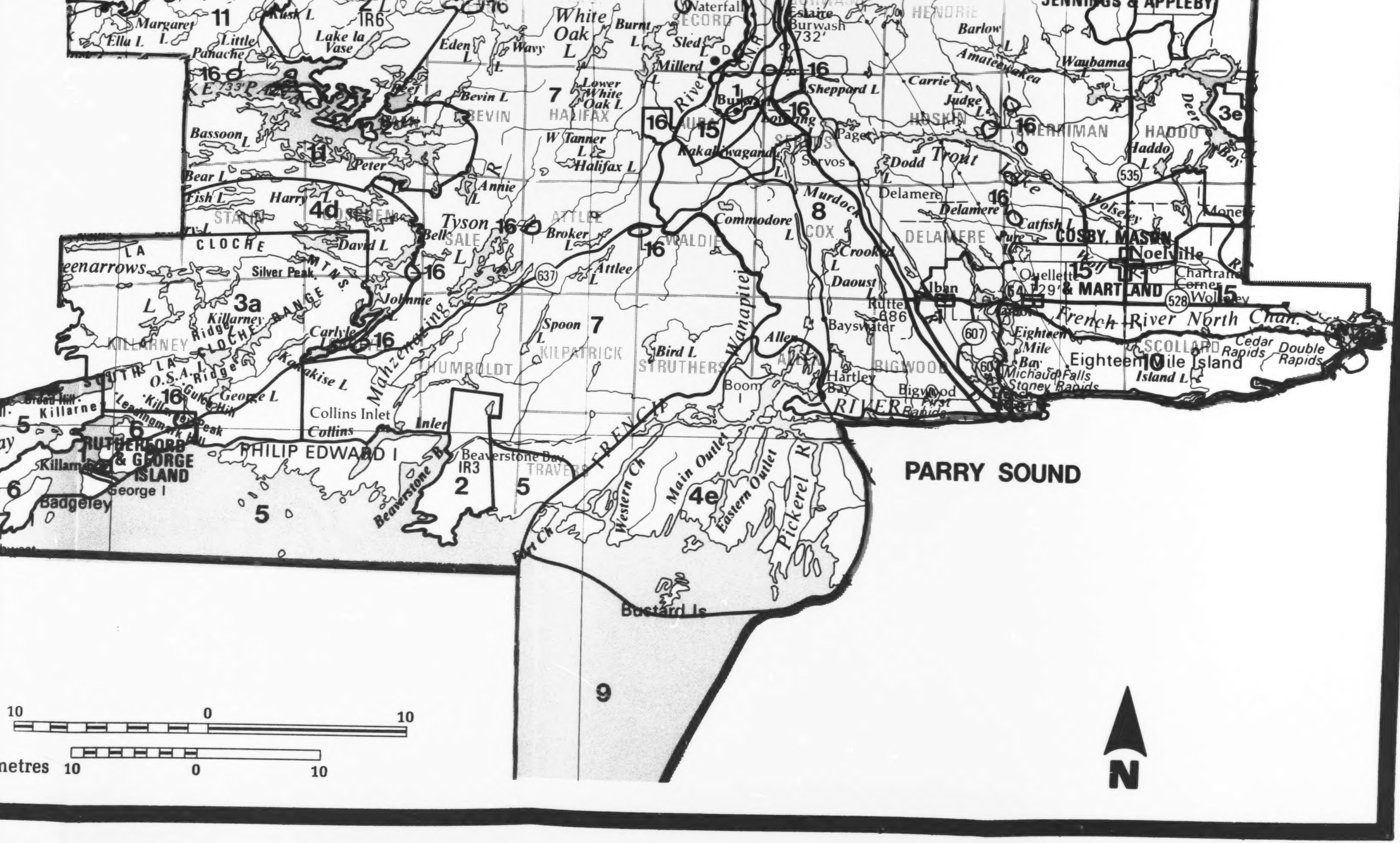
Wanapitei
876' Bonanza
Lake
Rathbun
Donald
Kelly
Hess L
Nelson L
Joe L
Hanmer
Capreol
998'
14
Kukagami L
Washagami L
16
Cartier
1382'
Seal L
17
15
Nelson R
Cartier
W. Morgan L
Morgan L
Kettle Rapids
Suez
Valley East
Blue L
1
Southeast B
Outlet B
Ashigami L
Davis
16
Levack
Moose L
River
Val Thérese
Hagarty
Hanmer
Skead
C.N.R.
13
Windy Lake
Onaping
Levack
69
Val Caron
Bailey Corners
Lambart Rapids
Basin Mines
Crerar
Kabikotitwia
Rayside
Blezard Valley
Bailey Corners
Windy L
High Falls
Dowling
Chelmsford
Garson L
Nickel
16
Loughrin
Cascaden
Cascaden L
Phelans
Larchwood
Balfour
Boninville
McCrea Heights
Whitson L
Falconbridge
Happy Valley
River
Street
Falls
15
Azilda
18
17
Carlson
Garson Junction
Centre
Timmins Chute
Levey Cr
Whitewater L
Murray Mine
Frood Mine
Nickeldale
Callum
North
15
Vermilion L
Vermilion
Clara Belle
Lebel
Barrydowne
Coniston
Austin
Wanapitei
C.P.R.
Ratter L
Deer
Trill
12
16
Cameron
Gordon L
Emma L
East Creighton
Milate
Catchell
Alec Mine
Brodie
Ramsey L
Romford
Stinson
Awrey
Markstay
Hagar
8
Hugel
535
3d
Fairbank
Creighton
Meatbird L
Copper Cliff
Sudbury
Minnow L
Lansdale
Wahnapitae Cr
Hagar
Ratter &
18
Cascade Falls
O'Donnell
Lively
Walden
Crean Hill
Duncan Chutes
Victoria Mine
Worthington
Naughton
16
17
69
Rheault
Raft L
McFarlane
Nepewassi R
Dunnet
Appleby Corner
537
Cleland
Dill
St Cloud
Red Deer L
Hawley
Lake
Wanup
732'
Dill L
Brodill
Elbow
7
15
Dunnet
Macpherson
19
16
Whitefish
Whitefish L
Numag L
Makada L
St Charles
Casimir,
Jennings & Appleby
Casimir
Chief L
16
Paddy L
Waterfall
69
Nepewassi
8
Burwash
Estaire
Burwash
732'
Hendrie
17
Lorne Falls
Grassy L
River
549
Round L
2
1R6
Tilton
White Oak L
Burnt L
Record
Margaret L
11
Little Panache
Ella L
Rusk L
Lake la Vase
Eden L
Wavy
Sled L
Millerd
C.N.R.
16
Barlow
Amateewakea
Waubamac
16
Bevin L
7
Lower White Oak L
Sheppard L
Carrie L
Judge L
3e
Bevin
Halifax
16
Laura
15
Servos
Page
Hoskin
Cherriman
Haddo
Haddo L
Deer Bay
Bassoon L
11
W Tanner L
Halifax L
Kakakiwaganda
Servos
Dodd L
Trout L
535
Bear L
Peter
Annie
Delamere
16
NORTH BAY



Ministry of Natural Resources
Ontario


JENNINGS & APPLEBY
HENDRIE
Waterfall
Estaire
Burwash
732'
RECORD
White Oak L
Burnt L
Sled L
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C.N.R.
16
Barlow L
Amateewakea
Waubamac L
Carrie L
Judge L
Sheppard L
Deer Bay
3e
HADDO
Haddo L
MERRIMAN
HOSKIN
Trout Lake
Pagel
Servos
Dodd L
535
Delamere
Delamere
Catfish L
Wolseley
Money
COSBY, MASON
Noelville
Chartrand Corner
Wolseley
15
& MARTLAND
528
Ouellette
729'
64
Alban
Rutter
686
Bayswater
Daoust L
Crooked L
Murdock
8
COX
DELAMERE
Commodore L
WALDIE
607
Eighteen Mile Bay
Michaud Falls
Stoney Rapids
French River North Chan.
SCOLLARD
Eighteen Mile Island
10
Island L
Cedar Rapids
Double Rapids
Bigwood
BIGWOOD
First Rapids
Hartley Bay
RIVER
Allen
ALLEN
Boom I
Wanapitei
Bird L
STRUTHERS
KILPATRICK
Spoon L
7
Attlee L
637
Broker L
ATTLEE
Tyson L
SALE
Bell
16
Annie L
W Tanner L
Halifax L
HALIFAX
7
Lower White Oak L
Bevin L
BEVIN
Eden L
Wavy
Kakakiwaganda
LAURA
15
1
Burwash
Bowring
River
Margaret L
Ella L
11
Rush L
IR6
Lake la Vase
Little Panache
16
Bassoon L
11
Peter
Bear L
Fish L
Harry L
4d
STALIN
CLOCHE
David L
Silver Peak
MTNS.
Killarney Ridge
LA CLOCHE RANGE
3a
Johnnie L
Carlyle L
16
Mahzenazing
KILLARNEY
SOUTH LA CLOCHE
O.S.A. L
Ridge
Kakakise L
George L
Killarney
5
6
Killarney
RUTHERFORD & GEORGE ISLAND
George I
Badgeley
6
Collins Inlet
Collins
Inlet
HUMBOLDT
PHILIP EDWARD I
Beaverstone Bay
IR3
2
Beaverstone B
5
5
TRAVERS
FRENCH
Western Ch
Main Outlet
4e
Eastern Outlet
Pickerel R
Bustard Is
9
PARRY SOUND
10
0
10
metres 10
0
10
N

POOR

QUALITY

ORIGINAL